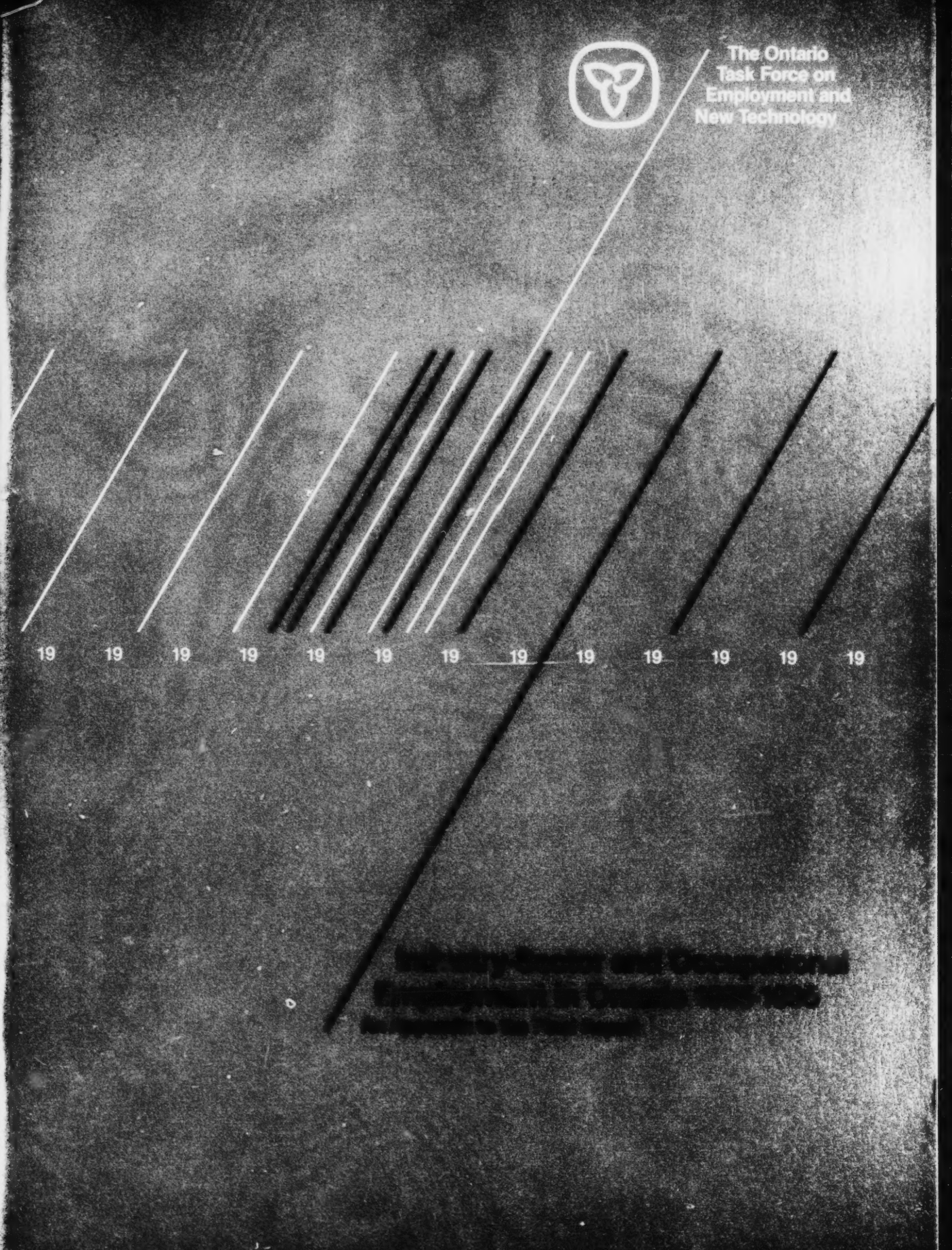
The Ontario
Task Force on
Employment and
New Technology
19
19
19
19
19
19
19
19
19
19
19
19
19

86-03666/

ONTARIO TASK FORCE ON EMPLOYMENT AND NEW TECHNOLOGY

Co-Chairmen of the Task Force

WILLIAM B. BOGGS
Chairman and President, The de Havilland Aircraft of Canada Ltd.

ROBERT WHITE
Director for Canada, United Auto Workers Union

Members of the Task Force

RALPH BARFORD
Chairman, Valleydene Corporation Ltd.

JALYNN BENNETT
Investment Vice-President, The Manufacturers Life Insurance Co.

LUCIE NICHOLSON
President, Ontario Division, Canadian Union of Public Employees

FRED POMEROY
President, Communications Workers of Canada

THOMAS ARMSTRONG
Deputy Minister, Ontario Ministry of Labour

BENSON WILSON
Chairman, Ontario Manpower Commission

Staff

Richard Brown, Research Director

Stanley But

Hildegard Martens

INDUSTRY-SECTOR AND OCCUPATIONAL EMPLOYMENT IN ONTARIO, 1985 - 1995

This Appendix contains a report prepared for the Ontario Task Force on Employment and New Technology. The topic was approved in advance by the Task Force. At the conclusion of the study, the Task Force had the opportunity to review the report but its release does not necessarily imply endorsement of the results by the Task Force or its individual members.

© Her Majesty the Queen in Right of Ontario, 1985
ISBN: 0-7729-0489-8

Additional copies of this and other Ontario Government publications are available from:

The Ontario Government Bookstore, 880 Bay Street, Toronto for personal shopping. Out-of-town customers write to Publications Services Section, 5th Floor, 880 Bay Street, Toronto, M7A 1N8. Telephone (416) 965-6015. Toll free long distance 1-800-268-7540, in area code 807 dial 0-Zenith 67200. Mastercard and Visa accepted. Cheques and money orders payable to the Treasurer of Ontario. Prepayment required.

FOREWORD

The Ontario Task Force on Employment and New Technology, a joint labour-management group, was established in May 1984 "to consider and report on the manpower and employment implications of new technologies as the same may be introduced and applied in Ontario during the next decade and the extent and nature thereof."

To inform its discussions, the Task Force established a research agenda designed to gather information on employment and technological change from a wide variety of sources. The research agenda contained projects which gathered information of a historical nature, and projects with a future orientation which were designed to gather information describing likely occupational and employment implications associated with technological change over the 1985-1995 period.

The Appendices to the Final Report of the Ontario Task Force on Employment and New Technology contain reports of these research projects. A complete list of these Appendices may be found at the rear of this document.

This Appendix estimates Ontario's employment levels by industry-sector and by occupational group for the 1985-1995 period. Since no one can say with absolute certainty what employment patterns will unfold in the future, this report assembles information from a wide variety of knowledgeable sources which describe, at this point in time, expectations for likely directions and magnitudes of future employment-related changes. The objective is to provide useful information on what is currently viewed as the likely extent and nature of the employment implications of new technology for the 1985-1995 period.

Dr. Richard L. E. Brown, P.Eng.
Research Director

ACKNOWLEDGEMENTS

The Ontario Task Force on Employment and New Technology has been generously supported by financial contributions from:

The Board of Industrial Leadership and Development (BILD) of the Government of Ontario;

The Ontario Manpower Commission; and

The Ontario Ministry of Labour.

The work presented in this report reflects earlier research activities of the Ontario Manpower Commission, whose technical support and assistance is acknowledged.

The valuable contribution made by Stanley But, the author of this report, is most warmly acknowledged. The assistance of Mehboob Janmohamed, and Monica van Huystee in the preparation of the report was most helpful. The special study of the Community, Business and Personal Services sector was conducted by Dr. Hildegard Martens.

Special thanks are due to all those industry experts who participated in the gathering of industry-sector employment estimates.

SUMMARY

The main objective of this report is to estimate Ontario's employment levels by industry-sector and by occupational group for the 1985-1995 period. The report examines employment levels, employment growth, occupational distributions, and occupational employment growth patterns for all 23 industry-sectors. In order to establish pespective, comparisons are made with similar data for the 1971-1981 period.

The analysis of this report suggests that total employment in Ontario is expected to increase by about 743,000 jobs over the 1985-1995 period. Employment growth is projected to occur in almost all industry-sectors over the next decade, though for many sectors at much slower rates than in the 1970's. Approximately 80 percent of all new jobs are expected to be in service-related industry-sectors.

The Community, Business and Personal Service sector is expected to be the leading contributor to employment growth (52 percent). Within this sector, Services to Business Management, Accommodation and Food Services, Health and Welfare Services, and Amusement and Recreation Services are expected to contribute most of the employment growth; Education and Related Services is projected to have little employment growth. Many industry-sectors are expected to contribute significantly less to employment growth over the next decade than during the 1970's. Major changes are expected in Trade; Finance, Insurance and Real Estate; and Public Administration.

Almost all occupational groups are expected to gain in employment over the 1985-1995 period, with the exception of Teaching occupations and Fishing, Hunting and Trapping occupations. Five occupational groups together are projected to account for about 70 percent of overall employment growth: Clerical; Service; Managerial and Administrative; Natural Sciences, Engineering and Mathematics; and Sales occupations. Of the major occupational groups, Natural Sciences, Engineering and Mathematics occupations, and Service occupations are expected to account for a larger share of overall employment growth during the next decade than they did over the 1970's. All other major occupational groups will have a reduced share of overall employment growth. Clerical and Fabricating occupations, for example, will only grow at half their recent rates.

TABLE OF CONTENTS

PAGE

Foreword i

Acknowledgements iii

Summary v

Table of Contents vii

List of Tables ix

List of Appendices xi

1.0 Introduction 1

2.0 Industry-Sector Employment, 1985-1995 3

2.1 Methodology 3
2.2 Special Survey of Community, Business and Personal Services Sector 5
2.3 Notable Patterns in the Industry-Sector Employment Data 7

3.0 Occupational Distribution, 1985-1995 9

3.1 Methodology 9
3.2 Notable Patterns in the Occupational Distribution Data 14

4.0 Occupational Employment, 1985-1995 15

4.1 Methodology 15
4.2 Notable Patterns in the Occupational Employment Data 15

5.0 Comparisons of Employment Patterns, 1971-1981 and 1985-1995 19

5.1 Industry-Sector Employment Growth 19
5.2 Occupational Distribution 21
5.3 Occupational Employment Growth 25

Appendices 27

LIST OF TABLES

PAGE

TABLE 1: Employment By 23 Industry-Sectors for All Occupations, Ontario, 1985-1995 4

TABLE 2: Employment in the Community, Business and Personal Services Sector in Ontario, 1985, 1990 and 1995 6

TABLE 3: Proportion of Industry-Sector Occupational Employment Contained Within Selected 3-Digit Industries 10

TABLE 4: Occupational Distribution by 2-Digit Occupational Groups in Ontario 12

TABLE 5: Employment by 2-Digit Occupational Groups for All Industries, Ontario, 1985-1995 16

TABLE 6: Large Contributors to Employment Growth, Ontario, 1985-1995 18

TABLE 7: Industry-Sector Employment Growth, 1971-1981 and 1985-1995 20

TABLE 8: Change in Occupational Distribution, 1971-1981 and 1985-1995 22

TABLE 9: Occupational Employment Growth, 1971-1981 and 1985-1995 24

LIST OF APPENDICES

		PAGE
APPENDIX A:	A Survey of Employment Estimates for all Industry-Sectors in Ontario, 1985-1995	27
APPENDIX B:	Comparison of Occupational Employment Estimations Using Flexible and Fixed Occupational Distributions	29
APPENDIX C:	Sensitivities of Occupational Employment to Uncertainties in Data	31
APPENDIX D:	Industry-Sector Occupational Distribution for Ontario, 1985-1995	33
APPENDIX E:	Labour Force Projections for Ontario	57
APPENDIX F:	Occupational Employment for All Industry-Sectors in Ontario, 1985-1995	59
APPENDIX G:	Definitions of Occupational Groups	83
APPENDIX H:	Definitions of Industry-Sectors	85

1.0 INTRODUCTION

The objective of this report is to estimate Ontario's employment levels by industry-sector and by occupational group for the 1985-1995 period. The study was prepared for the Ontario Task Force on Employment and New Technology to assist in its examination of the manpower and employment implications of new technology in Ontario over the next decade.

In developing its research program, the Task Force recognized the importance of gathering up-to-date information on present and expected future employment levels, as well as the likely impacts of new technology on different occupational groups. A research agenda was established to examine the impact of technological change on employment when viewed at different levels of aggregation in the economy, including the level of the firm and industry, the industry-sector level, and the level of the overall economy. This particular study deals with the industry-sector level, and provides a means of gathering together data from other studies performed at the firm and industry level, and the level of the overall economy.

In general, the process of estimating the levels of occupational employment in any industry-sector requires an estimate of the total employment for that industry-sector, and a knowledge of that sector's employment distribution patterns of all occupational groups.

This report first deals with industry-sector total employment. It describes the results obtained from a survey of industry-sector employment estimates gathered from a wide range of sources for 1985-1995 in Ontario. The report then proceeds with estimates of occupational distribution by industry-sector and for all Ontario. This provides a direct and important link to technological change. As organizations adopt new technology to reach their goals, the changing nature of work tasks result in measureable occupational trends. These are industry-specific, and the changing occupational composition of that industry's workforce reflects the changing nature of that industry's technology. This report describes the results of using various techniques for estimating future occupational distribution patterns, including a methodology for using up-to-date information gathered from a survey of 21 industries.

Data regarding industry-sector total employment are brought together with the occupational distribution estimates to produce estimates of future occupational employment levels.

Finally, in order to establish a perspective on the estimates of employment for the 1985-1995 period, comparisons are provided with similar data for the 1971-1981 period. Comparisons are made of industry-sector total employment growth, changes in occupational distributions, and occupational employment growth.

2.0 INDUSTRY-SECTOR EMPLOYMENT, 1985-1995

A survey was conducted to gather information from a wide range of sources regarding industry-sector employment estimates for the 1985-1995 period (see Appendix H for definitions of the 23 industry-sectors used in this study).

2.1 Methodology

About two dozen industry experts participated in this survey. Data were gathered from major banks, investment houses, research organizations, government agencies and departments, crown corporations, and industry associations. With the exception of economic forecasting houses, where projections were up-dated regularly and readily available, participants in the survey were asked to provide their estimates of future employment levels for as many of the 23 industry-sectors as they felt qualified. In the case of industry associations, they were asked to comment on the specific industry-sector in which they had particular expertise.

In this study, personal interviews were held with the majority of participants, who received written instructions, industry definitions, and historical data by industry-sector in both numerical and graphical form. The respondents were not given a particular set of future economic projections to prompt their reactions, since the potential overall steering effect of this approach was deemed to be undesirable. Respondents were simply asked to indicate their estimates of employment levels they felt were likely to develop over the 1985-1995 period.

A second round of the survey was subsequently conducted, covering eleven industry-sectors in which there were highly scattered employment estimates. Respondents were provided with summaries of the first-round results and asked to consider their previous employment estimates and to revise them if they wished. If the new response lay outside the interquartile range of the first-round results, the respondent was asked to state the reason for making the projection that much different than the majority judgement of the group. The second-round survey results showed considerable convergence of data.

TABLE 1

EMPLOYMENT BY 23 INDUSTRY-SECTORS FOR ALL OCCUPATIONS, ONTARIO, 1985 - 1995

Industry-Sector	Employed Labour Force			Employment Growth (000)		
	1985	1990	1995	1985-1995	1985-1990	1990-1995
Agriculture, Fishing & Trapping	137	138	140	3	1	2
Forestry	11	12	13	2	1	1
Mineral Fuel Mines & Wells	1.7	1.7	1.7	0	0	0
Other Mines & Quarries	38	41	42	4	3	1
Food, Feed, Beverage & Tobacco	97	102	108	11	5	6
Textile & Clothing	70	70	70	0	0	0
Wood and Furniture	58	61	67	9	3	6
Paper & Allied Industries	118	123	130	12	5	7
Primary Metal & Metal Fabricating	152	165	176	24	13	11
Motor Vehicles & Parts	102	104	108	6	2	4
Machinery & Other Transportation Equipment	90	100	105	15	10	5
Electrical Products	90	97	102	12	7	5
Chemical, Rubber & Petroleum	104	109	112	8	5	3
Non-metallic Mineral Products	27	28	29	2	1	1
Other Manufacturing Industries	61	68	73	12	7	5
Construction	208	220	237	29	12	17
Electric Power and Gas Utilities	46	48	54	8	2	6
Transportation & Storage	157	170	183	26	13	13
Communication	95	104	113	18	9	9
Trade	685	745	795	110	60	50
Finance, Insurance & Real Estate	253	260	275	22	7	15
Community, Business and Personal Services	1,340	1,500	1,725	385	160	225
Public Administration	270	280	295	25	10	15
All Industries	4,210.7	4,546.7	4,953.7	743	336	407

Based on Medium Employment Estimates

Approximately ten to twelve projections were received for each of the 23 industry-sectors under study. Employment estimates supplied by survey participants were considered to be equally important and therefore received equal weight in the determination of median employment estimates for each of the 23 industry-sectors in Ontario over the 1985-1995 period. Table 1 shows the median employment estimates resulting from the survey. Appendix A contains additional details of survey results.

2.2 Special Survey of Community, Business and Personal Services Sector

A special survey was conducted in the Community, Business and Personal Services sector after preliminary results for this sector, as described in Section 2.1, were apparent. Since the Community, Business and Personal Services sector contributed most to employment growth in the last decade, and since the preliminary results of the industry-sector employment survey revealed similar expectations for the future, a special survey of sub-groups within the sector was carried out independently in order to determine where growth will likely occur and what employment levels are expected.

The sector is composed of the following major sub-groups:

- Education and Related Services
- Health and Welfare Services
- Religious Organizations
- Amusement and Recreation Services
- Services to Business Management
- Personal Services
- Accommodation and Food Services
- Miscellaneous Services

Over 80 percent of total employment in this sector in 1981 was found in just four of the major sub-groups: Education and Related Services; Health and Welfare Services; Accommodation and Food Services; Services to Business Management. Accordingly, special survey activities were concentrated in these four groups.

TABLE 2

EMPLOYMENT IN THE COMMUNITY, BUSINESS AND PERSONAL SERVICES SECTOR IN ONTARIO
1985, 1990 and 1995

Industry Sub-Group	Employment 1981		Expected Employment						Employment Growth 1985-1995	
			1985		1990		1995			
	Total (000)	% of Total	Total (000)	% of Total	Total (000)	% of Total	Total (000)	% of Total	Total (000)	% of Total
Education & Related Services	261.3	22.4	277.9	21.3	278.8	18.6	281.6	16.1	3.7	0.8
Health & Welfare Services	280.9	24.1	282.3	21.6	284.7	19.0	334.7	19.1	52.4	11.8
Religious Organizations	.3	1.6	21.4	1.6	22.5	1.5	23.6	1.3	2.2	0.5
Amusement & Recreation Services	51.8	4.4	65.1	5.0	86.8	5.8	115.6	6.6	50.5	11.4
Services to Business Management	191.5	16.4	224.2	17.2	313.9	20.9	412.0	23.5	187.8	42.3
Personal Services	64.6	5.5	69.9	5.4	73.6	4.9	70.9	4.1	1.0	0.2
Accommodation & Food Services	211.8	18.2	276.0	21.1	344.6	23.0	413.5	23.6	137.5	30.9
Miscellaneous Services	83.6	7.2	89.4	6.8	94.1	6.3	98.6	5.6	9.2	2.1
TOTAL:	1165.6	100.0	1306.2	100.0	1499.0	100.0	1750.5	100.0	444.3	100.0

Source: Census of Canada and Special Survey Results

In the special survey, twelve professional and industry associations offered their estimates of employment levels pertinent to the four subgroups. For those groups not surveyed, other methods of estimation were used; the usual assumption being that employment would grow at the same rate as the overall population.

The results of this special survey are presented in Table 2.

2.3 Notable Patterns in the Industry-Sector Employment Data

- The aggregation of median employment estimates for all 23 industry-sectors indicates that total employment in Ontario is expected to increase by about 743,000 persons over the 1985-1995 period, thus suggesting the annual creation of new job additions will be approximately 75,000 per year.

- When the projected total employment growth over the next decade is broken down into two 5-year periods, employment growth between 1985 and 1990 is expected to increase by 336,000, compared with 407,000 for the 1990-1995 period.

- The goods-producing industries are expected to create about 157,000 new jobs (21 percent) over this period, while services-producing industries are expected to generate about 586,000 new jobs (79 percent).

- Among industry-sectors, the Community, Business and Personal Services sector is expected to be the leading contributor to employment growth (52 percent), followed by the Trade sector (15 percent).

- Conversely, industry-sectors which are expected to have little or no employment growth over the next decade include: Textile and Clothing; Mineral Fuel Mines and Wells; Forestry; Other Mines and Quarries; Non-Metallic Mineral Products; and Agriculture, Fishing and Trapping.

- The following seven industry-sectors together are expected to account for about 621,000 new jobs, or about 84 percent of the projected total employment increase:

  - Community, Business and Personal Services (385,000 jobs)
  - Trade (110,000 jobs)
  - Construction (29,000 jobs)
  - Transportation and Storage (26,000 jobs)
  - Public Administration (25,000 jobs)
  - Primary Metal and Metal Fabricating (24,000 jobs)
  - Finance, Insurance and Real Estate (22,000 jobs)

- Major findings from the special survey of the Community, Business and Personal Services sector are:

  - Within the major sub-groups of this sector, Services to Business Management is expected to be the leading contributor to employment growth (42 percent), followed by Accommodation and Food Services (31 percent), Health and Welfare Services (12 percent), and Amusement and Recreation Services (11 percent).

  - Education and Related Services is projected to have little employment growth (1 percent).

3.0 OCCUPATIONAL DISTRIBUTION, 1985-1995

To reflect the changing patterns of skills required by industry as new technology is adopted, this report uses a flexible occupational distribution approach in estimating the occupational employment in Ontario over the 1985-1995 period. In this flexible approach, occupational distributions are not fixed, as is commonly the case with occupational projection systems, but are allowed to change over the future projection time period under carefully controlled constraints.

The flexible occupational distribution approach used in this study incorporates the findings of 21 future-oriented industry studies targetted to examine the likely employment implications of new technology on selected industries and occupations, and statistical analyses using Labour Force Survey and Census data to identify occupational employment trends. This flexible approach was applied to each 2-digit occupational group for each of the 23 industry-sectors in Ontario, and estimates were made of the occupational distributions for all sectors, for 1985, 1990, and 1995 (see Appendix G for definitions of the 23 occupational groups used in this study).

3.1 Methodology

In the estimation of occupational distributions, most occupational projection systems in Canada use the most comprehensive source of information, Census data, which is available only every ten years. Because of this limitation, most models tend to assume fixed occupational distributions for future time periods. Thus, with such an approach, the projected occupational distribution for any industry at, say, 1995, would be assumed the same as that of 1981, the year for which most recent Census data are available. Although using fixed occupational distributions is one approach, it clearly has fundamental limitations when attempting to estimate changes in future occupational employment patterns related to technological change.

Professor Noah Meltz's study entitled "Changes in the Occupational Composition of the Canadian Labour Force, 1931-1961", demonstrated

TABLE 3

PROPORTION OF INDUSTRY-SECTOR OCCUPATIONAL EMPLOYMENT CONTAINED WITHIN SELECTED 3-DIGIT INDUSTRIES

(SIC) 3-Digit Industries	Industry Sector	(In Percentage)							
		Man. & Admin.	Nat. Sci.	Clericals	Sales	Processing	Machining	Fab. Assbly.	Mat. Hand.
291, 304, 306, 309	9	54.9	55.4	—	—	61.9	58.0	59.7	70.5
315, 318, 321	11	83.3	84.9	—	—	76.3	71.1	68.5	58.0
335	12	42.2	54.4	—	—	11.4	22.2	34.1	14.4
165	13	13.1	8.4	—	—	16.9	46.6	44.9	26.4
544, 545	19	59.2	82.8	39.5	58.4	—	—	—	—
631, 642	20	12.8	14.9	38.8	30.7	—	—	—	—
701, 721, 735	21	77.4	86.4	85.1	73.5	—	—	—	—
853, 867	22	8.2	20.7	4.1	5.1	—	—	—	—
909, 931, 951	23	96.2	92.8	92.8	83.8	—	—	—	—

large changes in occupational distributions among major occupational groups over the 1931-1961 period. Significant occupational change during the 1971-1981 period is described in Appendix 2 to the Task Force's Final Report.

Using the flexible approach and data from various sources, future industry-sector occupational distributions were estimated.

First, using a survey of selected industries, information was gathered about technological, employment and occupational trends that are likely to occur over the next decade. (These industry studies were undertaken by Currie, Coopers and Lybrand--see Appendices 4-18 to the Task Force's Final Report). The industries and occupations under study and their employment representations within larger industry-sectors are presented in Table 3.

Second, the Labour Force Survey (1975-1983) and Census (1971 and 1981) data were analyzed to identify particular occupational employment trends. This data analysis provided the basis for estimating the occupational distribution of occupations not covered by the above-mentioned industry studies. Time-trend relationships were fitted to the Labour Force Survey occupational data, and where there were good statistical fits, the trends were utilized to determine the most recent rates of occupational change which were then applied to the Census data to estimate future occupational distributions.

There were a hierarchy of decision rules used in estimating future occupational distributions; and they are briefly summarized as follows:

(1) Data from the special industry studies were always used as the first priority of choice for estimating future occupational distributions; these studies included the research projects undertaken by Currie, Coopers and Lybrand and a special survey of the Community, Business and Personal Services sector.

TABLE 4

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	4.9	7.5	8.4	9.1	9.1
21	NATURAL SCI.	3.2	3.9	4.3	4.8	5.0
23	SOCIAL SCI.	1.0	1.7	1.8	1.9	2.0
25	RELIGION	0.2	0.2	0.3	0.2	0.2
27	TEACHING	4.0	4.0	4.3	3.9	3.6
31	MEDICINE	3.8	4.2	4.3	4.0	4.2
33	ARTIST	0.8	1.2	1.4	1.5	1.6
37	SPORTS	0.2	0.2	0.3	0.3	0.4
41	CLERICAL	17.6	19.5	19.9	19.9	20.1
51	SALES	9.7	9.7	9.1	9.0	8.9
61	SERVICE	10.5	11.2	12.7	13.2	13.6
71	FARMING	4.4	3.5	3.4	3.2	3.1
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.3	0.2	0.2	0.2	0.2
77	MINING	0.6	0.4	0.4	0.4	0.4
81	PROCESSING	3.6	3.6	3.5	3.5	3.4
83	MACHINING	3.8	3.3	3.0	2.9	2.8
85	FABRICATING	8.2	8.7	8.8	8.5	8.3
87	CONSTRUCTION	6.1	5.3	4.8	4.6	4.6
91	TRANSPORTATION	3.6	3.4	3.2	3.1	3.1
93	MAT. HANDLING	2.4	2.2	2.2	2.0	2.0
95	OTHER CRAFTS	1.4	1.3	1.3	1.3	1.2
99	OTHER OCC.	9.7	4.6	2.3	2.3	2.3
	TOTAL	100.0	100.0	100.0	100.0	100.0

(2) For the remaining occupational groups, where special industry study data were not available, recent Labour Force Survey data (1975-1983) were used to estimate changes in occupational distribution; regression analyses were used to estimate the rate of change for occupational groups with employment levels of over 4,000, and the results were used when they were statistically significant.

(3) For occupational groups not covered by the above, 1971 and 1981 Census data (1971 definitions) were used to estimate changes in occupational distribution.

(4) With the exception of the Community, Business and Personal Services sector, the occupational distribution for all industry-sectors in 1995 were fixed at the 1990 levels. (The occupational data from the special industry studies for the 1990-1995 period were tested and changes in occupational distribution were insignificant).

(5) By way of preventing spurious estimations, with the exception of occupations for which data were available from the special industry studies, no occupation was allowed to have more than +2.83 percent increase, or -2.83 percent decrease, in occupational distribution over the 1981-1995 period (see Appendix 2 to the Task Force's Final Report for detailed analysis of changes in occupational distribution over the 1971-1981 period).

(6) Occupational groups that were fixed at the 1981 level include: the residual occupational group, Other occupations; all small occupational groups with employment of less than 200 in 1981, and which experienced negative employment growth; and all occupational groups in the smallest industry-sector, Mineral Fuel Mines and Wells.

The results of this approach are presented in the occupational distributions shown in Appendix D and Table 4. Appendix D presents the

occupational distributions for each 2-digit occupational group in each of the 23 industry-sectors. Table 4 shows the results of overall occupational distributions for the 2-digit occupational groups by aggregating all 23 industry-sectors together; in so doing, changes in occupational distribution presented in Appendix D were included, as well as changes in industry-sector employment levels discussed in Section 2.

3.2 Notable Patterns in the Occupational Distribution Data

- The occupational distribution across all industry-sectors at the 2-digit occupational level shows that no occupational group is expected to gain or lose more than 1 percent of overall occupational distribution.

- Occupational groups which are expected to have relatively large gains in their share of total employment in Ontario over the 1985-1995 period include: Service occupations (up 0.9 percent), Natural Sciences, Engineering and Mathematics occupations (up 0.7 percent); and Managerial and Administrative occupations (up 0.7 percent).

- Occupational groups which are expected to have relatively large losses in their share of total employment during this period include: Teaching and related occupations (down 0.7 percent); Product Fabricating, Assembling and Repairing occupations (down 0.5 percent); Farming, Horticultural and Animal-Husbandry occupations (down 0.3 percent).

4.0 OCCUPATIONAL EMPLOYMENT, 1985-1995

4.1 Methodology

Using the median industry-sector total employment survey estimates and the occupational distributions discussed in Section 2.1 and 3.1, estimates of occupational employment for each 2-digit occupational group in each of the 23 industry-sectors were calculated. Table 5 shows a summary set of occupational employment data aggregated across all industry-sectors, and Appendix F shows occupational employment data for each industry-sector. In addition, Table 6 focusses on those major occuptional groups and industry-sectors contributing most to employment growth over the 1985-1995 period.

Appendices B and C present analyses of the occupational employment estimates to changes in data. Appendix B shows the occupational employment estimates that would result for 1985-1995 if the occupational distributions for 1981 were used. Appendix C shows the range of occupational employment estimates which would result if uncertainties on total employment estimates for 1985-1995 were used.

4.2 Notable Patterns in the Occupational Employment Data

- o In aggregate, all of the 23 two-digit occupational groups, with the exception of Teaching occupations and Fishing, Hunting and Trapping occupations, are expected to gain in employment over the 1985-1995 period.

- o Of the 743,000 new jobs expected to be created over this period, five occupational groups together are projected to account for approximately 518,000 jobs (70 percent). These occupational groups are:

  - Clerical occupations (157,000 jobs)
  - Service occupations (139,000 jobs)

TABLE 5

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS FOR ALL INDUSTRIES, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	354.8	8.4	412.2	9.1	451.7	9.1	96.9	13.0	57.4	17.1	39.5	9.7
21	NATURAL SCI.	180.0	4.3	220.5	4.8	248.7	5.0	68.7	9.2	40.5	12.1	28.2	6.9
23	SOCIAL SCI.	75.1	1.8	86.4	1.9	99.0	2.0	23.9	3.2	11.3	3.4	12.6	3.1
25	RELIGION	10.9	0.3	10.7	0.2	12.3	0.2	1.4	0.2	-0.2	-0.1	1.6	0.4
27	TEACHING	180.8	4.3	178.3	3.9	178.5	3.6	-2.3	-0.3	-2.5	-0.7	0.2	0.0
31	MEDICINE	181.4	4.3	181.7	4.0	207.0	4.2	25.5	3.4	0.3	0.1	25.2	6.2
33	ARTIST	59.5	1.4	69.1	1.5	78.5	1.6	19.0	2.6	9.6	2.9	9.4	2.3
37	SPORTS	12.7	0.3	14.3	0.3	18.0	0.4	5.3	0.7	1.6	0.5	3.7	0.9
41	CLERICAL	837.7	19.9	906.8	19.9	995.1	20.1	157.4	21.2	69.1	20.6	88.3	21.7
51	SALES	382.9	9.1	408.7	9.0	438.9	8.9	56.0	7.5	25.7	7.7	30.3	7.4
61	SERVICE	536.7	12.7	600.9	13.2	675.7	13.6	138.9	18.7	64.1	19.1	74.8	18.4
71	FARMING	144.4	3.4	146.8	3.2	151.2	3.1	6.8	0.9	2.4	0.7	4.4	1.1
73	FISHING	1.5	0.0	1.4	0.0	1.4	0.0	-0.0	-0.0	-0.1	-0.0	0.0	0.0
75	FORESTRY	9.2	0.2	9.7	0.2	10.5	0.2	1.3	0.2	0.5	0.1	0.8	0.2
77	MINING	17.9	0.4	18.9	0.4	19.4	0.4	1.5	0.2	1.0	0.3	0.5	0.1
81	PROCESSING	149.2	3.5	157.2	3.5	166.1	3.4	16.9	2.3	8.0	2.4	8.9	2.2
83	MACHINING	125.3	3.0	132.4	2.9	140.6	2.8	15.4	2.1	7.1	2.1	8.3	2.0
85	FABRICATING	369.4	8.8	386.4	8.5	409.6	8.3	40.2	5.4	17.0	5.0	23.2	5.7
87	CONSTRUCTION	202.0	4.8	208.8	4.6	225.7	4.6	23.6	3.2	6.8	2.0	16.9	4.1
91	TRANSPORTATION	135.7	3.2	140.9	3.1	152.3	3.1	16.6	2.2	5.2	1.6	11.3	2.8
93	MAT. HANDLING	90.6	2.2	91.3	2.0	97.1	2.0	6.5	0.9	0.7	0.2	5.8	1.4
95	OTHER CRAFTS	56.2	1.3	57.2	1.3	61.8	1.2	5.6	0.8	1.0	0.3	4.6	1.1
99	OTHER OCC.	96.5	2.3	106.0	2.3	114.6	2.3	18.1	2.4	9.5	2.8	8.6	2.1
	TOTAL	4210.7	100.0	4546.7	100.0	4953.7	100.0	743.0	100.0	336.0	100.0	407.0	100.0

- Managerial and Administrative occupations (97,000 jobs)
- Natural Sciences, Engineering and Mathematics occupations (69,000 jobs)
- Sales occupations (56,000 jobs)

o The five identified occupational groups in the seven industry-sectors noted in Table 6 are expected to account for about 462,000 new jobs over the 1985-1995 period, or about 62 percent of all new jobs to be created in Ontario during this period.

o The five identified occupational groups are expected to account for almost all the new jobs to be created in the Trade; Finance, Insurance and Real Estate; and Public Administration sectors.

o Employment growth of some occupations is also expected to be dominated by particular industry-sectors; for example, the Community, Business and Personal Services sector is expected to account for almost 93 percent of the new jobs to be created for Service occupations in Ontario.

TABLE 6

LARGE CONTRIBUTORS TO EMPLOYMENT GROWTH, ONTARIO, 1985 - 1995
(SELECTED INDUSTRIES AND OCCUPTIONAL GROUPS)

Ind. Code	Industry	All Occ. Total (000)	Clerical	Service	Man/Admin	Sales	Nat. Sci.	Sel. Occ. Total (000)	Sel. Occ. As % of All Occ.
ALL INDUSTRIES TOTAL (000)		743.0	157.4	138.9	96.9	56.0	68.7	518.0	69.7%
22	Com/Bus Services	385.0	80.3	128.8	37.3	9.4	39.8	295.6	76.8%
20	Trade	110.0	31.5	0.2	19.2	41.2	2.2	94.3	85.7%
23	Public Admin.	25.0	5.4	7.5	5.8	0.3	3.1	22.1	88.4%
18	Transportation	26.0	6.5	0.9	3.2	0.3	0.1	11.0	42.3%
9	Pr. Metal/Fabricate	24.0	2.6	0.1	1.9	0.0	2.6	7.2	30.0%
21	Finance/Insurance	22.0	6.9	1.2	5.3	4.8	4.5	22.7	103.2%
16	Construction	29.0	4.1	0.0	4.7	0.3	0.3	9.4	32.4%
SELECTED IND. TOTAL (000)		621.0	137.3	138.7	77.4	56.3	52.6	462.3	74.4%
OTHER IND. TOTAL (000)		122.0	20.1	0.2	19.5	-0.3	16.1	55.7	
SEL. IND. AS % OF ALL IND.		83.6%	87.2%	99.9%	79.9%	100.5%	57.9%	89.3%	

5.0 COMPARISON OF EMPLOYMENT PATTERNS, 1971-1981 AND 1985-1995

5.1 Industry-Sector Employment Growth

Table 7 shows a comparison of industry-sector employment growth for 1971-1981 with the estimated growth for 1985-1995. (The 1971-1981 data are derived from an analysis of Census data reported in Appendix 2 of the Task Force's Final Report.)

The aggregation of median employment estimates for the 23 industry-sectors indicates that total employment in Ontario will increase by approximately 743,000 persons over the next decade. This compares with employment growth of approximately one million over the 1971-1981 period. However, the labour force in Ontario is also expected to grow at a slower pace, between 644,000 and 712,000 over the 1985-1995 period (see Appendix E), and the overall employment growth picture for Ontario should be viewed in that context.

Employment growth is expected to occur in almost all industry-sectors over the 1985-1995 period, though for many sectors at much slower rates than in the 1970's.

Relative to the 1971-1981 period, industry-sectors which are expected to increase their share of overall employment growth in Ontario over the next decade include:

- Community, Business, and Personal Services
- Construction
- Electrical Products
- Food, Feed, Beverage and Tobacco
- Other Manufacturing

Conversely, industry-sectors which are expected to grow, but to contribute a smaller share of overall employment growth include:

TABLE 7

INDUSTRY-SECTOR EMPLOYMENT GROWTH, 1971 - 1981 AND 1985 - 1995

Ind. Code	Industry	Employment Growth (000) 1971 - 1981	% of Total	Employment Growth (000) 1985 - 1995	% of Total
22	Com/Bus. Services	418	41.4	385	51.8
20	Trade	215	21.3	110	14.8
16	Construction	33	3.3	29	3.9
18	Trans. & Storage	40	4.0	26	3.5
23	Public Administration	50	5.0	25	3.4
9	Prim. Metal/Fab.	37	3.7	24	3.2
21	Finance/Ins.	97	9.6	22	3.0
19	Communication	29	2.9	18	2.4
11	Machinery/Trans.	26	2.6	15	2.0
8	Paper & Allied	19	1.9	12	1.6
12	Electrical Prod.	14	1.4	12	1.6
15	Oth. Manufacturing	14	1.4	12	1.6
5	Food, Feed, Tobacco	12	1.2	11	1.5
7	Wood/Furniture	22	2.2	9	1.2
13	Chemical/Petrl'm	26	2.6	8	1.1
17	Utilities	17	1.7	8	1.1
10	Motor Veh. & Parts	13	1.3	6	0.8
4	Other Mines	1	0.1	4	0.5
1	Agri/Fishing	8	0.8	3	0.4
2	Forestry	5	0.5	2	0.3
14	Non Metal Mineral	2	0.2	2	0.3
3	Mineral Fuel/Mine	1	0.1	0.0	0
6	Text/Clothing	16	1.6	0.0	0
99	Other Industries	(103)	(10.2)		
—	All Industries	1,009	100.0	743	100.0

- Trade
- Finance, Insurance, and Real Estate
- Public Administration
- Chemical, Rubber and Petroleum
- Transportation and Storage
- Primary Metal and Metal Fabricating
- Wood and Furniture
- Utilities
- Communication
- Machinery and Other Transportation
- Motor Vehicles and Parts

Industry-sectors which are expected to have no employment growth at all during the 1985-1995 period include:

- Textile and Clothing
- Mineral Fuel Mines and Wells

It should be noted that many industry-sectors are expected to contribute significantly less to employment growth over the next decade than during the 1970's. Major changes are expected in: Trade; Finance, Insurance and Real Estate; and Public Administration. Manufacturing industry-sectors are only expected to contribute about one-half the number of additional new jobs for the next decade which were created during the 1970's.

5.2 Occupational Distribution

Table 8 shows a comparison of changes in occupational distribution over all industry-sectors in 1971-1981 and those expected for 1985-1995.

The expected changes in occupational distribution over the next decade are comparable with the changes in occupational distribution over the 1971-1981 period. (This is also true of comparisons with the changes in occupational distribution for Canada over the three ten-year

TABLE 8

CHANGE IN OCCUPATIONAL DISTRIBUTION, 1971 - 1981 AND 1985 - 1995

Occ. Code	Occupation	Change in Distribution (Percent) 1971 - 1981	1985 - 1995
11	Man. & Admin.	2.6	0.7
21	Natural Sci.	0.7	0.7
23	Social Sci.	0.7	0.2
25	Religion	0.0	(0.1)
27	Teaching	0.0	(0.7)
31	Medicine	0.4	(0.1)
33	Artist	0.4	0.2
37	Sports	0.0	0.1
41	Clerical	1.9	0.2
51	Sales	0.0	(0.2)
61	Service	0.7	0.9
71	Farming	(0.9)	(0.3)
73	Fishing	0.0	0.0
75	Forestry	(0.1)	0.0
77	Mining	(0.2)	0.0
81	Processing	(0.0)	(0.1)
83	Machining	(0.5)	(0.2)
85	Fabricating	0.5	(0.5)
87	Construction	(0.8)	(0.2)
91	Transportation	(0.2)	(0.1)
93	Mat. Handling	(0.2)	(0.2)
95	Other Crafts	(0.1)	(0.1)
99	Other Occ.	(5.1)	0.0
	All Occupations	0.0	0.0

periods between 1931-1961). However, the expected changes in employment levels as a result of these relatively small changes in occupational distribution are likely to be significant in numbers, particularly for the major occupational groups.

Relative to the 1971-1981 period, occupational groups which are expected to continue to increase their share of the overall occupational distribution over the 1985-1995 period include:

- Service occupations
- Natural Sciences, Engineering, and Mathematics occupations
- Managerial and Administrative occupations
- Clerical occupations
- Social Sciences and Related occupations
- Artistic, Literary, Performing Arts and Related occupations

Occupational groups which are expected to reverse their growth pattern from the 1971-1981 period and begin to lose their share of the overall occupational distribution over the 1985-1995 period include:

- Teaching occupations
- Product Fabricating, Assembly and Repairing occupations
- Medicine and Health occupations
- Sales occupations

Relative to the 1971-1981 period, occupational groups which are expected to continue to decrease their share of the overall occupational distribution over the 1985-1995 period include:

- Farming, Horticultural and Animal-Husbandry occupations
- Machining occupations
- Construction Trades occupations
- Processing occupations
- Transport Equipment Operating occupations
- Material-Handling and Related occupations

TABLE 9

OCCUPATIONAL EMPLOYMENT GROWTH, 1971 - 1981 AND 1985 - 1995

Occ. Code	Occupation	Employment Growth (000) 1971 - 1981	% of Total	Employment Growth (000) 1985 - 1995	% of Total
41	Clerical	256	25.4	157	21.2
61	Service	134	13.3	139	18.7
11	Man. & Admin.	160	15.9	97	13.0
21	Natural Sci.	60	5.9	69	9.2
51	Sales	98	9.7	56	7.5
85	Fabricating	104	10.3	40	5.4
31	Medicine	54	5.4	26	3.4
87	Construction	29	2.9	24	3.2
23	Social Sci.	38	3.8	24	3.2
33	Artist	25	2.5	19	2.6
81	Processing	37	3.7	17	2.3
91	Transportation	29	2.9	17	2.2
83	Machining	19	1.9	16	2.1
71	Farming	7	0.7	7	0.9
93	Mat. Handling	16	1.6	7	0.9
95	Other Crafts	12	1.2	6	0.8
37	Sports	5	0.5	5	0.7
77	Mining	(1)	(0.1)	2	0.2
75	Forestry	1	0.1	1	0.2
25	Religion	2	0.2	1	0.2
73	Fishing	0	0.0	0	0.0
27	Teaching	41	4.1	(2)	(0.3)
99	Other Occ.	(115)	(11.4)	18	2.4
—	All Occupations	1,009	100.0	743	100.0

5.3 Occupational Employment Growth

The occupational employment growth data for 1985-1995 reported in Table 9, is compared here with actual occupational employment growth for the 1971-1981 period.

The five occupational groups which together accounted for most of employment growth (70 percent) in the 1971-1981 period are expected to maintain their share of employment growth (70 percent) over the next ten years. These occupational groups are: Clerical occupations; Service occupations; Managerial and Administrative occupations; Natural Sciences, Engineering and Mathematics occupations; and Sales occupations.

Relative to the 1971-1981 period, Service occupations and Natural Sciences, Engineering and Mathematics occupations are expected to account for a larger share of overall employment growth over the next decade. All other major occupational groups will have a reduced share of overall employment growth. Clerical and Fabricating occupations, for example, will only grow at half their recent rates.

Although Teaching occupations experienced an employment growth of 41,000 over the 1971-1981 period, their employment level is expected to remain essentially constant over the next decade.

APPENDIX A

SURVEY OF INDUSTRY-SECTOR EMPLOYMENT ESTIMATES, ONTARIO, 1985-1995

Ind Code	Industry	No. of Survey Respon-dents	Employed Labour Force (000)									85-95 Median Growth
			1985			1990			1995			
			High	Median	Low	High	Median	Low	High	Median	Low	
1	Agri., Fish., Trap.	13	143	137	125	150	138	127	162	140	125	3
2	Forestry	12	13	11	10	15	12	10	15	13	8	2
3	Mineral Fuel Mine	7	1.8	1.7	1.6	1.9	1.7	1.5	2	1.7	1.4	0
4	Other Mines	9	42	38	34	50	41	34	62	42	31	4
5	Food, Feed, Tobacco	12	100	97	92	115	102	92	120	108	95	11
6	Textiles	12	75	70	60	79	70	45	82	70	30	0
7	Wood and Furniture	12	64	58	53	73	61	48	74	67	40	9
8	Paper and Allied	12	121	118	113	136	123	110	142	130	110	12
9	Pr. Metal Fabricating	13	162	152	138	175	165	125	198	176	88	24
10	Motor Vehicle Parts	11	108	102	98	115	104	99	125	108	80	6
11	Mach. & Other Transp.	12	95	90	81	108	100	88	118	105	84	15
12	Electrical Products	12	99	90	82	109	97	82	115	102	83	12
13	Chemical Rubber/Petr.	12	107	104	100	112	109	94	119	112	97	8
14	Non-Metallic Mineral	12	29	27	24	32	28	24	35	29	25	2
15	Other Manufact. Ind.	11	70	61	58	74	68	61	80	73	58	12
16	Construction	10	232	208	198	251	220	198	261	237	200	29
17	Utilities	10	48	46	44	54	48	42	65	54	42	8
18	Transportation	10	164	157	148	185	170	150	198	183	148	26
19	Communication	12	100	95	92	115	104	95	130	113	95	18
20	Trade	12	705	685	680	795	745	710	875	795	730	110
21	Finance/Insurance	13	278	253	246	314	260	250	343	275	260	22
22	Comm./Business Serv.	12	1374	1340	1320	1599	1500	1380	1810	1725	1450	385
23	Public Administration	11	283	270	251	316	280	252	338	295	238	25
	All Industries		4210.7			4546.7			4953.7			743

APPENDIX B

Comparison of Occupational Employment Estimations Using Flexible and Fixed Occupational Distribution Approaches

This appendix presents the results of two sets of occupational employment outlook data using the same total employment estimates for the 23 industry-sectors but different occupational distributions.

This report uses a flexible occupational distribution approach to estimate occupational employment in Ontario over the 1985-1995 period. This approach incorporates the findings of 21 industry studies targetted to examine the likely employment impacts of new technologies on selected industries and occupations. Other information used in the estimation of occupational distributions includes statistical analyses to identify occupational employment trends.

Another method would be to use a fixed occupational distribution approach, which is commonly used by most occupational projection systems in Canada. However, because this approach assumes that all future occupational compositions of industries will be the same as 1981, the most recent date for which Census information is available, it cannot reflect any changes in occupational patterns which have occurred since that time. When making estimates for the period up to 1995 this is clearly a disadvantage.

Table B1 presents the results of this comparison. It is interesting to note the differences in terms of employment growth over the 1985-1995 period between the two approaches. If one were to use the fixed occupational distribution approach, while assuming the flexible occupational distribution was in fact somewhat closer to the true values, then, for the ten-year period, one would have over-estimated the demand for Teaching and related occupations by about 56,000 and Medicine and Health occupations by about 28,000, and under-estimated the demand for Managerial and Administrative occupations by about 44,000 and Natural Sciences, Engineering and Mathematics occupations by about 40,000.

TABLE B1

COMPARISON OF OCCUPATONAL EMPLOYMENT USING FLEXIBLE AND FIXED OCCUPATIONAL DISTRIBUTION APPROACHES

Occ. Code	Occupation Name	EMPLOYMENT						Employment Growth 1985 - 1995	
		Flexible Occupational Distribution Approach			Fixed Occupational Distribution Approach				
		1985	1990	1995	1985	1990	1995	Flexible Approach	Fixed Approach
11	Man. & Admin.	354.8	412.2	451.7	322.2	345.8	375.1	96.9	52.9
21	Natural Sci.	180.0	220.5	248.7	165.0	178.0	193.8	68.7	28.8
23	Social Sci.	75.1	86.4	99.0	75.6	83.4	94.2	23.9	18.6
25	Religion	10.9	10.7	12.3	10.6	11.8	13.6	1.4	3.0
27	Teaching	180.8	178.3	178.5	190.5	212.9	244.3	-2.3	53.8
31	Medicine	181.4	181.7	207.0	197.9	220.6	251.9	25.5	54.0
33	Artist	59.5	69.1	78.5	56.3	61.7	68.6	19.0	12.3
37	Sports	12.7	14.3	18.0	11.3	12.5	14.2	5.3	2.9
41	Clerical	837.7	906.8	995.1	839.8	904.4	982.5	157.4	142.7
51	Sales	382.9	408.7	438.9	407.4	439.0	469.6	56.0	62.2
61	Service	536.7	600.9	675.7	510.6	563.1	635.9	138.9	125.3
71	Farming	144.4	146.8	151.2	147.0	149.8	154.1	6.8	7.1
73	Fishing	1.5	1.4	1.4	1.3	1.3	1.3	-0.0	0
75	Forestry	9.2	9.7	10.5	9.5	10.3	11.1	1.3	1.6
77	Mining	17.9	18.9	19.4	17.2	18.5	19.1	1.5	1.9
81	Processing	149.2	157.2	166.1	149.4	158.3	167.0	16.9	17.6
83	Machining	125.3	132.4	140.6	131.2	141.1	150.0	15.4	18.8
85	Fabricating	369.4	386.4	409.6	370.3	395.2	418.9	40.2	48.6
87	Construction	202.0	208.8	225.7	212.7	226.3	244.3	23.6	31.6
91	Transportation	135.7	140.9	152.3	139.3	150.4	162.2	16.6	22.9
93	Mat. Handling	90.6	91.3	97.1	91.2	97.4	103.6	6.5	12.4
95	Other Crafts	56.2	57.2	61.8	57.2	60.6	65.4	5.6	8.2
99	Other Occ.	96.5	106.0	114.6	97.0	104.4	113.0	18.1	16.0
	Total	4,211	4,547	4,954	4,211	4,547	4,954	743	743

Figures in thousands

APPENDIX C

Sensitivity of Occupational Employment to Uncertainties in Data

For the purposes of this analysis, two additional employment ranges were used to examine the sensitivity of occupational employment to uncertainties associated with future total employment estimates. The median employment estimates for each of the 23 industry-sectors were allowed to vary +0, -1 percent, +1, -4 percent, +2, -5 percent for the years 1985, 1990, and 1995, respectively.

The ranges were based on the findings of 2 studies prepared by Drs. Peter Dungan and Arthur Younger, University of Toronto, and Leo de Bever, Chase Econometrics Canada (see Appendix 20 to the Task Force's Final Report). In their studies, employment ranges were established as a result of projecting an increase in productivity of 0.5 percent annually over the 1985-1995 period and determining the range of employment consequences resulting from widely differing scenarios of sharing the 'productivity dividends'. Thus, using productivity improvements as a proxy for technological change, the results of the study may be viewed as establishing a range of consequences on total employment estimates which are associated with uncertainties regarding future technological change.

Table C1 shows the ranges of occupational employment with lower bound estimates, median employment estimates, and upper bound estimates for each of the 2-digit occupational groups in Ontario over the 1985-1995 period. As might be expected, occupational employment is sensitive to the employment ranges assigned for future time periods. In particular, occupational groups with large employment shares are sensitive to changes in industry employment estimates.

For example, employment expectations for Clerical occupations range from 829,000 to 837,000 in 1985, with a median employment estimate of 837,000, and range from 945,000 to 1,015,000, with median employment estimate of 995,000 in 1995.

TABLE C1

RANGES OF EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS FOR ALL INDUSTRIES, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYMENT RANGES 1985 LOWER BOUND	1985 MEDIAN EMPLOY	1985 UPPER BOUND	1990 LOWER BOUND	1990 MEDIAN EMPLOY	1990 UPPER BOUND	1995 LOWER BOUND	1995 MEDIAN EMPLOY	1995 UPPER BOUND
11	MAN. & ADMIN.	351.3	354.8	354.8	395.7	412.2	416.3	429.1	451.7	460.7
21	NATURAL SCI.	178.2	180.0	180.0	211.7	220.5	222.7	236.3	248.7	253.7
23	SOCIAL SCI.	74.4	75.1	75.1	82.9	86.4	87.3	94.1	99.0	101.0
25	RELIGION	10.8	10.9	10.9	10.3	10.7	10.8	11.7	12.3	12.5
27	TEACHING	179.0	180.8	180.8	171.2	178.3	180.1	169.6	178.5	182.1
31	MEDICINE	179.6	181.4	181.4	174.4	181.7	183.5	196.6	207.0	211.1
33	ARTIST	58.9	59.5	59.5	66.4	69.1	69.8	74.6	78.5	80.1
37	SPORTS	12.6	12.7	12.7	13.8	14.3	14.5	17.1	18.0	18.3
41	CLERICAL	829.3	837.7	837.7	870.5	906.8	915.8	945.3	995.1	1015
51	SALES	379.1	382.9	382.9	392.3	408.7	412.8	417.0	438.9	447.7
61	SERVICE	531.4	536.7	536.7	576.8	600.9	606.9	641.9	675.7	689.2
71	FARMING	143.0	144.4	144.4	140.9	146.8	148.3	143.7	151.2	154.2
73	FISHING	1.4	1.5	1.5	1.3	1.4	1.4	1.3	1.4	1.4
75	FORESTRY	9.1	9.2	9.2	9.5	9.7	9.8	9.9	10.5	10.7
77	MINING	17.7	17.9	17.9	18.1	18.9	19.1	18.5	19.4	19.8
81	PROCESSING	147.7	149.2	149.2	150.9	157.2	158.8	157.8	166.1	169.4
83	MACHINING	124.0	125.3	125.3	127.1	132.4	133.7	133.6	140.6	143.5
85	FABRICATING	365.7	369.4	369.4	370.9	386.4	390.3	389.1	409.6	417.8
87	CONSTRUCTION	200.0	202.0	202.0	200.5	208.8	210.9	214.4	225.7	230.2
91	TRANSPORTATION	134.3	135.7	135.7	135.3	140.9	142.4	144.7	152.3	155.3
93	MAT. HANDLING	89.7	90.6	90.6	87.6	91.3	92.2	92.3	97.1	99.1
95	OTHER CRAFTS	55.6	56.2	56.2	54.9	57.2	57.8	58.7	61.8	63.0
99	OTHER OCC.	95.6	96.5	96.5	101.8	106.0	107.1	108.9	114.6	116.9
	TOTAL	4169	4211	4211	4365	4547	4592	4706	4954	5053

APPENDIX D1

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE AGRICULTURE, FISHING & TRAPPING INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	0.2	0.4	0.6	0.6	0.6
21	NATURAL SCI.	0.2	0.4	0.6	0.6	0.6
23	SOCIAL SCI.	0.0	0.0	0.0	0.0	0.0
25	RELIGION	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.0	0.0	0.0	0.0	0.0
31	MEDICINE	0.7	1.4	1.8	1.9	1.9
33	ARTIST	0.1	0.1	0.1	0.1	0.1
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	1.2	2.6	3.5	3.7	3.7
51	SALES	0.6	0.9	1.2	1.2	1.2
61	SERVICE	0.4	0.5	0.6	0.5	0.5
71	FARMING	93.3	89.9	87.4	87.1	87.1
73	FISHING	0.7	0.8	0.9	0.8	0.8
75	FORESTRY	0.1	0.2	0.3	0.4	0.4
77	MINING	0.0	0.0	0.0	0.1	0.1
81	PROCESSING	0.6	0.5	0.5	0.4	0.4
83	MACHINING	0.0	0.1	0.1	0.1	0.1
85	FABRICATING	0.1	0.3	0.4	0.5	0.5
87	CONSTRUCTION	0.1	0.3	0.4	0.4	0.4
91	TRANSPORTATION	0.4	0.5	0.7	0.6	0.6
93	MAT. HANDLING	0.4	0.4	0.4	0.3	0.3
95	OTHER CRAFTS	0.0	0.0	0.0	0.0	0.0
99	OTHER OCC.	1.1	0.7	0.7	0.7	0.7
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D2

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FORESTRY INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	1.2	2.6	3.0	3.7	3.7
21 NATURAL SCI.	3.0	9.3	11.8	12.1	12.1
23 SOCIAL SCI.	0.0	0.0	0.1	0.1	0.1
25 RELIGION	0.1	0.0	0.0	0.0	0.0
27 TEACHING	0.1	0.1	0.1	0.1	0.1
31 MEDICINE	0.0	0.1	0.2	0.2	0.2
33 ARTIST	0.1	0.0	0.0	0.0	0.0
37 SPORTS	0.1	0.0	0.0	0.0	0.0
41 CLERICAL	3.2	5.2	5.7	6.7	6.7
51 SALES	0.6	0.2	0.2	0.2	0.2
61 SERVICE	3.0	2.4	2.1	1.8	1.8
71 FARMING	2.2	3.1	3.3	3.7	3.7
73 FISHING	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	60.3	55.9	54.1	53.0	53.0
77 MINING	0.1	0.0	0.0	0.0	0.0
81 PROCESSING	4.0	3.0	2.4	2.0	2.0
83 MACHINING	2.0	1.2	1.2	1.2	1.2
85 FABRICATING	4.6	4.7	4.6	4.6	4.6
87 CONSTRUCTION	3.1	3.0	2.9	2.9	2.9
91 TRANSPORTATION	6.8	5.2	4.3	3.6	3.6
93 MAT. HANDLING	2.1	1.5	1.5	1.5	1.5
95 OTHER CRAFTS	0.6	0.7	0.7	0.8	0.8
99 OTHER OCC.	2.9	1.8	1.8	1.8	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D3

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MINERAL FUEL MINES & WELLS INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	9.9	16.1	16.1	16.1	16.1
21 NATURAL SCI.	14.9	15.0	15.0	15.0	15.0
23 SOCIAL SCI.	1.1	2.3	2.3	2.3	2.3
31 MEDICINE	0.0	0.3	0.3	0.3	0.3
33 ARTIST	0.6	0.3	0.3	0.3	0.3
41 CLERICAL	30.9	37.5	37.5	37.5	37.5
51 SALES	5.0	2.3	2.3	2.3	2.3
61 SERVICE	3.9	2.0	2.0	2.0	2.0
75 FORESTRY	0.0	0.0	0.0	0.0	0.0
77 MINING	6.1	8.9	8.9	8.9	8.9
81 PROCESSING	2.8	4.0	4.0	4.0	4.0
83 MACHINING	1.7	0.3	0.3	0.3	0.3
85 FABRICATING	2.8	2.3	2.3	2.3	2.3
87 CONSTRUCTION	1.1	2.3	2.3	2.3	2.3
91 TRANSPORTATION	5.0	0.6	0.6	0.6	0.6
93 MAT. HANDLING	1.1	1.4	1.4	1.4	1.4
95 OTHER CRAFTS	2.8	2.9	2.9	2.9	2.9
99 OTHER OCC.	10.5	1.4	1.4	1.4	1.4
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D4

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO

		OCCUPATIONAL DISTRIBUTION				
		1971	1981	1985	1990	1995
OCC. CODE	OCCUPATION NAME	% OF TOTAL	% OF TOTAL	% OF TOTAL	% OF TOTAL	% OF TOTAL
11	MAN. & ADMIN.	3.1	4.5	4.7	5.2	5.2
21	NATURAL SCI.	8.2	9.0	8.6	8.6	8.6
23	SOCIAL SCI.	0.1	0.3	0.4	0.5	0.5
27	TEACHING	0.1	0.3	0.4	0.4	0.4
31	MEDICINE	0.4	0.4	0.4	0.4	0.4
33	ARTIST	0.1	0.1	0.1	0.1	0.1
41	CLERICAL	6.8	7.9	7.7	7.9	7.9
51	SALES	0.4	0.4	0.4	0.4	0.4
61	SERVICE	1.6	2.2	2.2	2.4	2.4
71	FARMING	0.2	0.3	0.3	0.3	0.3
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.1	0.1	0.1	0.1
77	MINING	41.7	38.8	41.7	41.7	41.7
81	PROCESSING	4.8	5.2	4.9	4.9	4.9
83	MACHINING	3.2	3.0	2.7	2.6	2.6
85	FABRICATING	8.5	10.2	10.0	10.4	10.4
87	CONSTRUCTION	5.7	6.0	5.6	5.5	5.5
91	TRANSPORTATION	5.7	4.8	4.0	3.4	3.4
93	MAT. HANDLING	4.3	3.8	3.3	2.9	2.9
95	OTHER CRAFTS	1.2	1.0	0.8	0.7	0.7
99	OTHER OCC.	3.8	1.9	1.9	1.9	1.9
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D5

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO

		OCCUPATIONAL DISTRIBUTION				
OCC. CODE	OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	4.3	8.4	10.1	11.2	11.2
21	NATURAL SCI.	1.9	2.6	3.0	3.3	3.3
23	SOCIAL SCI.	0.1	0.2	0.2	0.3	0.3
27	TEACHING	0.0	0.0	0.0	0.0	0.0
31	MEDICINE	0.2	0.2	0.2	0.2	0.2
33	ARTIST	0.1	0.1	0.1	0.2	0.2
41	CLERICAL	14.6	14.7	15.2	15.3	15.3
51	SALES	14.9	9.4	8.1	6.6	6.6
61	SERVICE	3.2	3.4	3.6	3.7	3.7
71	FARMING	0.9	0.3	0.0	0.0	0.0
73	FISHING	0.1	0.1	0.1	0.1	0.1
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	32.0	33.5	31.3	30.7	30.7
83	MACHINING	1.1	0.7	0.5	0.3	0.3
85	FABRICATING	2.9	3.9	4.4	4.9	4.9
87	CONSTRUCTION	0.8	0.7	0.6	0.6	0.6
91	TRANSPORTATION	4.6	4.5	4.7	4.7	4.7
93	MAT. HANDLING	11.9	12.1	12.6	12.7	12.7
95	OTHER CRAFTS	1.2	1.0	0.9	0.8	0.8
99	OTHER OCC.	5.2	4.3	4.3	4.3	4.3
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D6

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	2.8	4.6	5.3	6.1	6.1
21	NATURAL SCI.	1.5	1.7	1.7	1.8	1.8
23	SOCIAL SCI.	0.1	0.1	0.1	0.1	0.1
27	TEACHING	0.0	0.1	0.2	0.3	0.3
31	MEDICINE	0.1	0.1	0.2	0.2	0.2
33	ARTIST	0.8	1.0	1.0	1.1	1.1
41	CLERICAL	10.7	10.9	10.8	10.7	10.7
51	SALES	3.8	3.1	2.8	2.4	2.4
61	SERVICE	3.4	2.6	2.2	1.7	1.7
71	FARMING	0.0	0.0	0.0	0.0	0.0
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	23.2	19.3	16.5	16.5	16.5
83	MACHINING	1.4	1.1	1.0	0.9	0.9
85	FABRICATING	42.4	46.6	49.4	49.4	49.4
87	CONSTRUCTION	0.7	0.5	0.4	0.3	0.3
91	TRANSPORTATION	0.5	0.5	0.5	0.5	0.5
93	MAT. HANDLING	3.1	3.8	4.0	4.3	4.3
95	OTHER CRAFTS	0.8	0.6	0.5	0.4	0.4
99	OTHER OCC.	4.6	3.4	3.4	3.4	3.4
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D7

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE WOOD & FURNITURE INDUSTRY, ONTARIO

		OCCUPATIONAL DISTRIBUTION				
OCC. CODE	OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	3.7	5.7	6.4	7.5	7.5
21	NATURAL SCI.	1.0	1.0	0.9	0.9	0.9
23	SOCIAL SCI.	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.0	0.0	0.0	0.1	0.1
31	MEDICINE	0.0	0.0	0.0	0.0	0.0
33	ARTIST	0.3	0.3	0.4	0.4	0.4
41	CLERICAL	10.5	9.9	9.6	9.5	9.5
51	SALES	4.1	2.8	2.2	1.5	1.5
61	SERVICE	1.5	1.1	1.0	0.8	0.8
71	FARMING	0.1	0.0	0.0	0.0	0.0
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	1.9	2.1	2.1	2.2	2.2
77	MINING	0.1	0.0	0.0	0.0	0.0
81	PROCESSING	10.6	11.0	11.1	11.5	11.5
83	MACHINING	13.2	9.3	7.7	6.4	6.4
85	FABRICATING	33.5	38.9	41.0	41.7	41.7
87	CONSTRUCTION	5.6	4.9	4.5	4.2	4.2
91	TRANSPORTATION	2.9	2.4	2.1	1.9	1.9
93	MAT. HANDLING	5.0	5.9	6.3	6.9	6.9
95	OTHER CRAFTS	0.9	0.5	0.3	0.1	0.1
99	OTHER OCC.	5.1	4.1	4.1	4.1	4.1
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D8

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PAPER & ALLIED INDUSTRIES INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	4.7	7.9	8.9	9.8	9.8
21 NATURAL SCI.	2.1	2.5	2.6	2.7	2.7
23 SOCIAL SCI.	0.1	0.2	0.2	0.3	0.3
25 RELIGION	0.0	0.0	0.0	0.0	0.0
27 TEACHING	0.1	0.1	0.1	0.1	0.1
31 MEDICINE	0.1	0.1	0.1	0.1	0.1
33 ARTIST	4.9	5.9	6.2	6.3	6.3
41 CLERICAL	18.4	18.2	18.0	17.1	17.1
51 SALES	8.6	6.1	6.7	7.3	7.3
61 SERVICE	1.7	1.5	1.4	1.2	1.2
71 FARMING	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	0.9	0.6	0.5	0.4	0.4
77 MINING	0.0	0.0	0.0	0.0	0.0
81 PROCESSING	10.5	11.2	12.2	13.1	13.1
83 MACHINING	2.2	1.6	1.4	1.1	1.1
85 FABRICATING	13.0	11.1	8.7	8.2	8.2
87 CONSTRUCTION	2.0	1.7	1.5	1.3	1.3
91 TRANSPORTATION	1.9	1.8	1.7	1.6	1.6
93 MAT. HANDLING	4.2	4.3	4.2	4.1	4.1
95 OTHER CRAFTS	21.2	22.7	23.0	22.7	22.7
99 OTHER OCC.	3.7	2.5	2.5	2.5	2.5
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D9

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	3.9	6.2	5.8	6.1	6.1
21	NATURAL SCI.	4.6	5.0	5.3	6.1	6.1
23	SOCIAL SCI.	0.1	0.1	0.1	0.1	0.1
27	TEACHING	0.0	0.1	0.1	0.1	0.1
31	MEDICINE	0.2	0.1	0.1	0.1	0.1
33	ARTIST	0.1	0.1	0.1	0.1	0.1
41	CLERICAL	12.2	11.6	10.5	10.5	10.5
51	SALES	2.6	2.0	1.6	1.4	1.4
61	SERVICE	1.7	1.5	1.2	1.1	1.1
71	FARMING	0.0	0.0	0.0	0.1	0.1
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.7	0.5	0.4	0.3	0.3
81	PROCESSING	14.8	18.5	20.8	20.6	20.6
83	MACHINING	28.6	27.5	28.1	28.0	28.0
85	FABRICATING	9.7	10.8	10.3	10.7	10.7
87	CONSTRUCTION	4.4	3.4	2.8	2.4	2.4
91	TRANSPORTATION	1.8	1.8	1.7	1.7	1.7
93	MAT. HANDLING	6.0	5.8	6.2	5.9	5.9
95	OTHER CRAFTS	0.9	0.8	0.6	0.6	0.6
99	OTHER OCC.	7.8	4.2	4.2	4.2	4.2
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D10

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	2.7	4.7	6.3	7.5	7.5
21 NATURAL SCI.	3.5	4.3	6.0	7.3	7.3
23 SOCIAL SCI.	0.1	0.1	0.1	0.1	0.1
27 TEACHING	0.0	0.1	0.1	0.1	0.1
31 MEDICINE	0.2	0.2	0.3	0.4	0.4
33 ARTIST	0.1	0.1	0.1	0.1	0.1
41 CLERICAL	11.9	10.4	11.3	10.6	10.6
51 SALES	1.6	1.1	1.0	0.7	0.7
61 SERVICE	2.7	2.2	2.4	2.1	2.1
71 FARMING	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	0.0	0.0	0.0	0.0	0.0
77 MINING	0.0	0.0	0.0	0.0	0.0
81 PROCESSING	2.4	1.9	2.0	1.7	1.7
83 MACHINING	20.6	19.1	16.8	16.3	16.3
85 FABRICATING	40.2	44.0	41.2	41.2	41.2
87 CONSTRUCTION	2.4	1.7	1.6	1.2	1.2
91 TRANSPORTATION	1.4	0.9	0.9	0.6	0.6
93 MAT. HANDLING	4.3	4.4	5.1	5.2	5.2
95 OTHER CRAFTS	0.3	0.4	0.5	0.5	0.5
99 OTHER OCC.	5.4	4.2	4.2	4.2	4.2
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D11

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MACHINERY & OTHER TRASNPORTATION INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	5.7	9.0	10.4	9.5	9.5
21	NATURAL SCI.	8.8	10.1	11.3	12.6	12.6
23	SOCIAL SCI.	0.2	0.1	0.1	0.1	0.1
27	TEACHING	0.1	0.1	0.2	0.2	0.2
31	MEDICINE	0.1	0.1	0.1	0.1	0.1
33	ARTIST	0.3	0.3	0.4	0.6	0.6
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	18.6	16.4	14.2	13.6	13.6
51	SALES	4.5	3.0	3.0	2.8	2.8
61	SERVICE	1.3	1.1	1.2	1.5	1.5
71	FARMING	0.1	0.1	0.1	0.1	0.1
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.1	0.1	0.1	0.1
81	PROCESSING	1.7	2.6	1.9	1.3	1.3
83	MACHINING	23.2	22.3	22.9	25.3	25.3
85	FABRICATING	24.6	27.1	26.3	24.4	24.4
87	CONSTRUCTION	2.6	2.0	2.0	2.0	2.0
91	TRANSPORTATION	0.3	0.7	0.7	0.7	0.7
93	MAT. HANDLING	2.6	2.2	1.9	1.8	1.8
95	OTHER CRAFTS	0.5	0.3	0.3	0.3	0.3
99	OTHER OCC.	4.2	2.4	2.6	3.0	3.0
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D12

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	4.9	8.6	9.9	10.3	10.3
21	NATURAL SCI.	10.2	11.9	14.0	15.3	15.3
23	SOCIAL SCI.	0.2	0.2	0.2	0.3	0.3
27	TEACHING	0.1	0.1	0.1	0.1	0.1
31	MEDICINE	0.1	0.2	0.2	0.2	0.2
33	ARTIST	0.3	0.3	0.3	0.4	0.4
41	CLERICAL	17.2	15.4	14.5	14.3	14.3
51	SALES	3.3	2.4	2.0	1.7	1.7
61	SERVICE	1.2	0.9	0.7	0.6	0.6
71	FARMING	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	2.4	3.2	3.5	4.0	4.0
83	MACHINING	11.3	9.4	7.7	7.1	7.1
85	FABRICATING	37.1	38.2	37.9	37.3	37.3
87	CONSTRUCTION	3.7	2.6	2.1	1.7	1.7
91	TRANSPORTATION	0.5	0.4	0.3	0.3	0.3
93	MAT. HANDLING	2.5	2.6	2.8	2.8	2.8
95	OTHER CRAFTS	0.7	0.6	0.5	0.5	0.5
99	OTHER OCC.	4.4	3.0	3.0	3.0	3.0
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D13

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO

		OCCUPATIONAL DISTRIBUTION				
OCC. CODE	OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	6.8	11.6	13.0	13.8	13.8
21	NATURAL SCI.	8.3	9.6	11.2	12.5	12.5
23	SOCIAL SCI.	0.3	0.5	0.5	0.7	0.7
27	TEACHING	0.1	0.2	0.2	0.2	0.2
31	MEDICINE	0.6	0.9	0.9	1.1	1.1
33	ARTIST	0.2	0.2	0.2	0.2	0.2
41	CLERICAL	18.4	16.6	13.9	14.4	14.4
51	SALES	6.9	4.5	3.3	2.0	2.0
61	SERVICE	2.2	1.5	1.2	0.9	0.9
71	FARMING	0.1	0.2	0.2	0.2	0.2
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.1	0.1	0.1	0.1	0.1
81	PROCESSING	15.9	16.1	15.3	15.3	15.3
83	MACHINING	3.0	2.5	3.5	3.8	3.8
85	FABRICATING	17.4	19.5	21.0	19.9	19.9
87	CONSTRUCTION	2.3	2.0	1.8	1.8	1.8
91	TRANSPORTATION	2.0	1.6	1.4	1.4	1.4
93	MAT. HANDLING	7.2	6.6	6.2	5.8	5.8
95	OTHER CRAFTS	1.9	1.6	1.4	1.4	1.4
99	OTHER OCC.	6.2	4.4	4.4	4.4	4.4
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D14

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	4.3	8.2	9.8	11.0	11.0
21 NATURAL SCI.	3.8	4.6	4.9	5.3	5.3
23 SOCIAL SCI.	0.0	0.2	0.2	0.3	0.3
27 TEACHING	0.0	0.3	0.4	0.5	0.5
31 MEDICINE	0.1	0.2	0.2	0.3	0.3
33 ARTIST	0.2	0.5	0.6	0.7	0.7
37 SPORTS	0.0	0.0	0.0	0.0	0.0
41 CLERICAL	12.0	12.2	12.1	12.1	12.1
51 SALES	4.1	3.7	3.5	3.3	3.3
61 SERVICE	2.1	1.2	0.9	0.4	0.4
71 FARMING	0.1	0.1	0.1	0.1	0.1
73 FISHING	0.0	0.0	0.0	0.0	0.0
77 MINING	0.6	0.6	0.6	0.6	0.6
81 PROCESSING	22.7	21.5	20.8	20.1	20.1
83 MACHINING	8.1	9.5	9.9	10.5	10.5
85 FABRICATING	7.8	7.6	7.4	7.2	7.2
87 CONSTRUCTION	8.1	6.7	6.1	5.4	5.4
91 TRANSPORTATION	8.9	8.6	8.4	8.2	8.2
93 MAT. HANDLING	9.0	8.8	8.6	8.4	8.4
95 OTHER CRAFTS	0.9	0.8	0.8	0.7	0.7
99 OTHER OCC.	7.1	4.8	4.8	4.8	4.8
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D15

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MANUFACTURING INDUSTRIES, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE / OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	5.2	7.3	8.6	10.1	10.1
21 NATURAL SCI.	3.9	3.9	4.0	3.9	3.9
23 SOCIAL SCI.	0.0	0.1	0.1	0.2	0.2
27 TEACHING	0.1	0.1	0.1	0.2	0.2
31 MEDICINE	1.8	2.6	3.0	3.4	3.4
33 ARTIST	1.5	1.8	1.9	2.0	2.0
41 CLERICAL	17.5	16.0	15.7	14.8	14.8
51 SALES	5.9	4.3	3.7	2.8	2.8
61 SERVICE	1.4	1.1	1.0	0.8	0.8
71 FARMING	0.1	0.0	0.0	0.0	0.0
75 FORESTRY	0.0	0.0	0.0	0.0	0.0
77 MINING	0.0	0.0	0.0	0.0	0.0
81 PROCESSING	5.7	4.7	4.4	3.9	3.9
83 MACHINING	8.5	6.6	4.1	3.7	3.7
85 FABRICATING	34.9	39.6	41.5	42.5	42.5
87 CONSTRUCTION	1.3	1.0	1.0	0.8	0.8
91 TRANSPORTATION	0.7	0.7	0.7	0.7	0.7
93 MAT. HANDLING	3.6	3.5	3.4	3.3	3.3
95 OTHER CRAFTS	1.7	1.8	1.8	1.8	1.8
99 OTHER OCC.	6.0	4.8	4.8	4.8	4.8
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D16

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CONSTRUCTION INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	4.1	6.5	7.9	8.9	8.9
21 NATURAL SCI.	2.3	2.2	2.3	2.1	2.1
23 SOCIAL SCI.	0.0	0.0	0.0	0.0	0.0
25 RELIGION	0.0	0.0	0.0	0.0	0.0
27 TEACHING	0.0	0.0	0.0	0.0	0.0
31 MEDICINE	0.0	0.0	0.0	0.0	0.0
33 ARTIST	0.1	0.1	0.1	0.1	0.1
37 SPORTS	0.0	0.0	0.0	0.0	0.0
41 CLERICAL	6.2	8.4	9.5	10.1	10.1
51 SALES	1.3	1.3	1.4	1.4	1.4
61 SERVICE	1.1	1.0	0.9	0.8	0.8
71 FARMING	2.2	3.1	3.5	3.8	3.8
73 FISHING	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	0.1	0.1	0.1	0.1	0.1
77 MINING	0.7	0.3	0.2	0.0	0.0
81 PROCESSING	0.5	0.6	0.6	0.6	0.6
83 MACHINING	4.2	3.5	3.2	2.7	2.7
85 FABRICATING	3.0	3.8	4.3	4.4	4.4
87 CONSTRUCTION	65.3	63.3	60.6	60.5	60.5
91 TRANSPORTATION	3.5	2.7	2.5	2.0	2.0
93 MAT. HANDLING	1.6	1.0	0.8	0.5	0.5
95 OTHER CRAFTS	0.3	0.2	0.2	0.2	0.2
99 OTHER OCC.	3.5	1.9	1.9	1.9	1.9
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D17

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO

		OCCUPATIONAL DISTRIBUTION				
OCC. CODE	OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	4.4	6.8	7.4	8.3	8.3
21	NATURAL SCI.	14.2	15.9	15.8	16.0	16.0
23	SOCIAL SCI.	0.3	0.3	0.3	0.3	0.3
27	TEACHING	0.2	0.4	0.5	0.5	0.5
31	MEDICINE	0.1	0.1	0.1	0.1	0.1
33	ARTIST	0.2	0.2	0.2	0.2	0.2
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	21.2	19.8	18.5	17.2	17.2
51	SALES	2.2	1.1	0.6	0.0	0.0
61	SERVICE	2.7	2.0	1.7	1.3	1.3
71	FARMING	0.7	0.4	0.4	0.4	0.4
75	FORESTRY	0.7	0.4	0.4	0.4	0.4
77	MINING	0.2	0.1	0.1	0.1	0.1
81	PROCESSING	0.4	0.6	0.7	0.8	0.8
83	MACHINING	1.6	2.2	2.3	2.5	2.5
85	FABRICATING	5.9	6.4	6.3	6.3	6.3
87	CONSTRUCTION	21.9	21.6	23.4	24.4	24.4
91	TRANSPORTATION	3.8	3.9	3.8	3.7	3.7
93	MAT. HANDLING	3.6	3.6	3.4	3.3	3.3
95	OTHER CRAFTS	9.9	10.7	10.5	10.5	10.5
99	OTHER OCC.	5.8	3.6	3.6	3.6	3.6
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D18

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	2.6	5.0	5.7	6.6	6.6
21	NATURAL SCI.	1.7	1.5	1.4	1.3	1.3
23	SOCIAL SCI.	0.1	0.1	0.1	0.1	0.1
27	TEACHING	0.2	0.3	0.4	0.4	0.4
31	MEDICINE	0.2	0.6	0.8	0.9	0.9
33	ARTIST	0.1	0.0	0.0	0.0	0.0
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	16.0	18.0	18.7	19.6	19.6
51	SALES	1.6	1.5	1.5	1.4	1.4
61	SERVICE	4.3	4.2	4.1	4.0	4.0
71	FARMING	0.2	0.2	0.2	0.1	0.1
75	FORESTRY	0.1	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.3	0.3	0.2	0.2	0.2
83	MACHINING	0.9	0.7	0.6	0.5	0.5
85	FABRICATING	7.3	7.2	7.1	7.0	7.0
87	CONSTRUCTION	7.0	6.4	6.1	5.7	5.7
91	TRANSPORTATION	47.9	46.1	45.3	44.2	44.2
93	MAT. HANDLING	5.4	5.4	5.4	5.4	5.4
95	OTHER CRAFTS	0.8	0.5	0.4	0.2	0.2
99	OTHER OCC.	3.1	2.0	2.0	2.0	2.0
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D19

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNICATION INDUSTRY, ONTARIO

	OCCUPATIONAL DISTRIBUTION				
OCC. CODE OCCUPATION NAME	1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11 MAN. & ADMIN.	5.9	10.1	11.2	11.9	11.9
21 NATURAL SCI.	4.2	5.1	6.6	7.2	7.2
23 SOCIAL SCI.	0.3	0.6	0.7	0.7	0.7
25 RELIGION	0.0	0.0	0.0	0.0	0.0
27 TEACHING	0.4	0.4	0.4	0.4	0.4
31 MEDICINE	0.0	0.1	0.1	0.1	0.1
33 ARTIST	5.9	7.3	8.0	8.0	8.0
37 SPORTS	0.0	0.0	0.0	0.0	0.0
41 CLERICAL	58.6	51.8	49.8	49.5	49.5
51 SALES	1.8	2.4	3.1	3.8	3.8
61 SERVICE	1.5	1.2	1.1	0.8	0.8
71 FARMING	0.0	0.0	0.0	0.0	0.0
81 PROCESSING	0.0	0.0	0.1	0.1	0.1
83 MACHINING	0.1	0.1	0.1	0.1	0.1
85 FABRICATING	2.0	2.4	2.6	2.6	2.6
87 CONSTRUCTION	12.9	13.5	11.4	10.6	10.6
91 TRANSPORTATION	0.8	0.5	0.4	0.3	0.3
93 MAT. HANDLING	1.8	1.1	0.9	0.5	0.5
95 OTHER CRAFTS	2.2	2.3	2.3	2.2	2.2
99 OTHER OCC.	1.4	1.0	1.0	1.0	1.0
TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D20

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRADE INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	3.3	5.7	7.1	8.5	8.5
21	NATURAL SCI.	0.5	0.9	1.1	1.2	1.2
23	SOCIAL SCI.	0.1	0.1	0.1	0.2	0.2
25	RELIGION	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.0	0.1	0.2	0.2	0.2
31	MEDICINE	0.8	1.0	1.2	1.2	1.2
33	ARTIST	0.6	0.7	0.7	0.7	0.7
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	22.1	24.9	26.5	26.8	26.8
51	SALES	43.3	40.3	37.5	37.5	37.5
61	SERVICE	2.9	2.5	2.4	2.1	2.1
71	FARMING	0.4	0.2	0.2	0.1	0.1
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	1.9	2.0	2.1	2.0	2.0
83	MACHINING	1.0	0.9	0.8	0.8	0.8
85	FABRICATING	11.9	11.4	11.3	10.6	10.6
87	CONSTRUCTION	0.9	0.9	0.9	0.8	0.8
91	TRANSPORTATION	3.4	3.0	2.9	2.6	2.6
93	MAT. HANDLING	3.4	2.8	2.6	2.2	2.2
95	OTHER CRAFTS	0.3	0.2	0.2	0.2	0.2
99	OTHER OCC.	3.2	2.3	2.3	2.3	2.3
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D21

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	12.6	16.9	18.5	18.9	18.9
21	NATURAL SCI.	1.9	2.8	3.5	4.8	4.8
23	SOCIAL SCI.	0.4	0.5	0.6	0.6	0.6
27	TEACHING	0.1	0.1	0.2	0.2	0.2
31	MEDICINE	0.1	0.1	0.1	0.1	0.1
33	ARTIST	0.2	0.3	0.4	0.3	0.3
37	SPORTS	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	50.4	48.1	45.5	44.4	44.4
51	SALES	24.1	23.5	22.1	22.1	22.1
61	SERVICE	5.3	4.6	6.0	6.0	6.0
71	FARMING	0.2	0.2	0.3	0.3	0.3
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.2	0.1	0.1	0.1	0.1
83	MACHINING	0.4	0.1	0.1	0.1	0.1
85	FABRICATING	0.5	0.4	0.3	0.2	0.2
87	CONSTRUCTION	0.8	0.7	0.7	0.5	0.5
91	TRANSPORTATION	0.2	0.2	0.1	0.1	0.1
93	MAT. HANDLING	0.2	0.1	0.1	0.1	0.1
95	OTHER CRAFTS	0.5	0.3	0.3	0.2	0.1
99	OTHER OCC.	1.8	1.1	1.1	1.1	1.1
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D22

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNITY, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	5.0	6.3	6.3	6.8	7.1
21	NATURAL SCI.	3.1	3.9	4.0	4.9	5.4
23	SOCIAL SCI.	2.9	4.4	4.2	4.3	4.4
25	RELIGION	0.9	0.8	0.8	0.7	0.7
27	TEACHING	16.4	13.8	13.0	11.4	9.9
31	MEDICINE	14.6	13.4	12.1	10.7	10.7
33	ARTIST	1.5	2.3	2.4	2.6	2.7
37	SPORTS	0.6	0.7	0.8	0.8	0.9
41	CLERICAL	15.2	16.3	16.3	16.8	17.3
51	SALES	1.9	1.8	1.9	1.9	2.0
61	SERVICE	30.0	29.1	31.0	31.8	31.5
71	FARMING	0.9	0.7	0.7	0.7	0.7
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.3	0.3	0.3	0.3	0.3
83	MACHINING	0.5	0.5	0.4	0.4	0.4
85	FABRICATING	1.3	1.4	1.4	1.4	1.4
87	CONSTRUCTION	0.9	0.7	0.7	0.7	0.7
91	TRANSPORTATION	0.8	1.0	1.0	1.1	1.1
93	MAT. HANDLING	0.2	0.3	0.3	0.3	0.3
95	OTHER CRAFTS	0.7	0.7	0.7	0.7	0.7
99	OTHER OCC.	2.5	1.7	1.7	1.8	1.8
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX D23

OCCUPATIONAL DISTRIBUTION BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO

OCC. CODE	OCCUPATION NAME	OCCUPATIONAL DISTRIBUTION 1971 % OF TOTAL	1981 % OF TOTAL	1985 % OF TOTAL	1990 % OF TOTAL	1995 % OF TOTAL
11	MAN. & ADMIN.	12.5	17.0	18.4	18.8	18.8
21	NATURAL SCI.	7.9	8.3	8.8	9.1	9.1
23	SOCIAL SCI.	2.9	4.5	4.9	5.6	5.6
25	RELIGION	0.0	0.0	0.0	0.0	0.0
27	TEACHING	1.0	1.0	0.9	0.9	0.9
31	MEDICINE	1.9	1.4	1.1	0.9	0.9
33	ARTIST	0.8	1.0	1.0	1.1	1.1
37	SPORTS	0.4	0.6	0.6	0.7	0.7
41	CLERICAL	29.7	29.9	29.3	28.6	28.6
51	SALES	0.5	0.3	0.3	0.4	0.4
61	SERVICE	24.7	23.3	23.2	23.8	23.8
71	FARMING	1.7	1.8	1.7	1.7	1.7
73	FISHING	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	1.2	0.2	0.1	0.1	0.1
77	MINING	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.1	0.2	0.2	0.2	0.2
83	MACHINING	0.3	0.2	0.1	0.1	0.1
85	FABRICATING	1.7	1.6	1.5	1.5	1.5
87	CONSTRUCTION	3.7	2.7	2.1	1.6	1.6
91	TRANSPORTATION	2.2	1.8	1.6	1.4	1.4
93	MAT. HANDLING	0.8	0.4	0.3	0.1	0.1
95	OTHER CRAFTS	1.5	1.1	0.9	0.8	0.8
99	OTHER OCC.	4.4	2.8	2.7	2.7	2.7
	TOTAL	100.0	100.0	100.0	100.0	100.0

APPENDIX E

Labour Force Projections

Labour Force projections for Ontario have been collected from various sources and are presented in the following table. The labour force data include the total number of persons employed and those actively looking for work.

The median projection which has been deduced from the collected data shows a labour force growth of about 644,000 over the 1985-1995 period, and a mean projection of about 712,000 over the same period.

LABOUR FORCE PROJECTIONS FOR ONTARIO
(000's)

Source	1985	1990	1995
A	4766	5148	5409
B	4739	5117	5410
C	4785	5246	5605
MEDIAN PROJECTION	4766	5148	5410
MEAN PROJECTION	4763	5170	5475

Sources:

A: University of Toronto, Focus-Prism Model, February 1985.

B: Informetrica, March 1985.

C. Chase Econometrics, December 1984.

APPENDIX F1

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE AGRICULTURAL, FISHING & TRAPPING INDUSTRY, ONTARIO, 1985 - 1995

		EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE	OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	0.8	0.6	0.8	0.6	0.8	0.6	0.1	2.6	0.1	6.6	0.0	0.6
21	NATURAL SCI.	0.8	0.6	0.9	0.6	0.9	0.6	0.1	2.7	0.1	6.8	0.0	0.6
23	SOCIAL SCI.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0
25	RELIGION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.0
27	TEACHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0
31	MEDICINE	2.5	1.8	2.6	1.9	2.6	1.9	0.2	5.5	0.1	12.8	0.0	1.9
33	ARTIST	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0
41	CLERICAL	4.7	3.5	5.1	3.7	5.2	3.7	0.4	14.3	0.4	35.5	0.1	3.7
51	SALES	1.6	1.2	1.7	1.2	1.7	1.2	0.1	2.1	0.0	4.0	0.0	1.2
61	SERVICE	0.8	0.6	0.7	0.5	0.7	0.5	-0.0	-0.4	-0.0	-2.2	0.0	0.5
71	FARMING	119.7	87.4	120.2	87.1	121.9	87.1	2.2	73.1	0.5	45.2	1.7	87.1
73	FISHING	1.2	0.9	1.1	0.8	1.2	0.8	-0.1	-2.5	-0.1	-9.3	0.0	0.8
75	FORESTRY	0.4	0.3	0.5	0.4	0.5	0.4	0.1	2.1	0.1	5.5	0.0	0.4
77	MINING	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.7	0.0	2.1	0.0	0.1
81	PROCESSING	0.7	0.5	0.6	0.4	0.6	0.4	-0.1	-4.6	-0.1	-14.5	0.0	0.4
83	MACHINING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.9	0.0	2.6	0.0	0.1
85	FABRICATING	0.6	0.4	0.7	0.5	0.7	0.5	0.1	2.7	0.1	7.3	0.0	0.5
87	CONSTRUCTION	0.5	0.4	0.5	0.4	0.6	0.4	0.1	2.1	0.1	5.4	0.0	0.4
91	TRANSPORTATION	0.9	0.7	0.9	0.6	0.9	0.6	-0.0	-0.1	-0.0	-1.7	0.0	0.6
93	MAT. HANDLING	0.5	0.4	0.4	0.3	0.4	0.3	-0.1	-2.7	-0.1	-8.9	0.0	0.3
95	OTHER CRAFTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	OTHER OCC.	0.9	0.7	0.9	0.7	0.9	0.7	0.0	0.7	0.0	0.7	0.0	0.7
	TOTAL	137.0	100.0	138.0	100.0	140.0	100.0	3.0	100.0	1.0	100.0	2.0	100.0

APPENDIX F2

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FORESTRY INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	0.3	3.0	0.4	3.7	0.5	3.7	0.1	7.4	0.1	11.0	0.0	3.7
21	NATURAL SCI.	1.3	11.8	1.5	12.1	1.6	12.1	0.3	13.8	0.2	15.4	0.1	12.1
23	SOCIAL SCI.	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.3	0.0	0.1
25	RELIGION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
31	MEDICINE	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.6	0.0	0.9	0.0	0.2
33	ARTIST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	0.6	5.7	0.8	6.7	0.9	6.7	0.2	12.0	0.2	17.4	0.1	6.7
51	SALES	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2
61	SERVICE	0.2	2.1	0.2	1.8	0.2	1.8	0.0	0.3	-0.0	-1.1	0.0	1.8
71	FARMING	0.4	3.3	0.4	3.7	0.5	3.7	0.1	6.2	0.1	8.6	0.0	3.7
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	6.0	54.1	6.4	53.0	6.9	53.0	0.9	47.1	0.4	41.2	0.5	53.0
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.3	2.4	0.2	2.0	0.3	2.0	-0.0	-0.7	-0.0	-3.4	0.0	2.0
83	MACHINING	0.1	1.2	0.1	1.2	0.1	1.2	0.0	1.2	0.0	1.2	0.0	1.2
85	FABRICATING	0.5	4.6	0.6	4.6	0.6	4.6	0.1	5.1	0.1	5.6	0.0	4.6
87	CONSTRUCTION	0.3	2.9	0.3	2.9	0.4	2.9	0.1	2.8	0.0	2.8	0.0	2.9
91	TRANSPORTATION	0.5	4.3	0.4	3.6	0.5	3.6	-0.0	-0.6	-0.0	-4.8	0.0	3.6
93	MAT. HANDLING	0.2	1.5	0.2	1.5	0.2	1.5	0.0	1.5	0.0	1.5	0.0	1.5
95	OTHER CRAFTS	0.1	0.7	0.1	0.8	0.1	0.8	0.0	1.0	0.0	1.2	0.0	0.8
99	OTHER OCC.	0.2	1.8	0.2	1.8	0.2	1.8	0.0	1.8	0.0	1.8	0.0	1.8
	TOTAL	11.0	100.0	12.0	100.0	13.0	100.0	2.0	100.0	1.0	100.0	1.0	100.0

APPENDIX F3

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MINERAL FUEL MINES & WELLS INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	0.3	16.1	0.3	16.1	0.3	16.1	0.0		0.0		0.0	
21	NATURAL SCI.	0.3	15.0	0.3	15.0	0.3	15.0	0.0		0.0		0.0	
23	SOCIAL SCI.	0.0	2.3	0.0	2.3	0.0	2.3	0.0		0.0		0.0	
31	MEDICINE	0.0	0.3	0.0	0.3	0.0	0.3	0.0		0.0		0.0	
33	ARTIST	0.0	0.3	0.0	0.3	0.0	0.3	0.0		0.0		0.0	
41	CLERICAL	0.6	37.5	0.6	37.5	0.6	37.5	0.0		0.0		0.0	
51	SALES	0.0	2.3	0.0	2.3	0.0	2.3	0.0		0.0		0.0	
61	SERVICE	0.0	2.0	0.0	2.0	0.0	2.0	0.0		0.0		0.0	
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
77	MINING	0.2	8.9	0.2	8.9	0.2	8.9	0.0		0.0		0.0	
81	PROCESSING	0.1	4.0	0.1	4.0	0.1	4.0	0.0		0.0		0.0	
83	MACHINING	0.0	0.3	0.0	0.3	0.0	0.3	0.0		0.0		0.0	
85	FABRICATING	0.0	2.3	0.0	2.3	0.0	2.3	0.0		0.0		0.0	
87	CONSTRUCTION	0.0	2.3	0.0	2.3	0.0	2.3	0.0		0.0		0.0	
91	TRANSPORTATION	0.0	0.6	0.0	0.6	0.0	0.6	0.0		0.0		0.0	
93	MAT. HANDLING	0.0	1.4	0.0	1.4	0.0	1.4	0.0		0.0		0.0	
95	OTHER CRAFTS	0.0	2.9	0.0	2.9	0.0	2.9	0.0		0.0		0.0	
99	OTHER OCC.	0.0	1.4	0.0	1.4	0.0	1.4	0.0		0.0		0.0	
	TOTAL	1.7	100.0	1.7	100.0	1.7	100.0	0.0		0.0		0.0	

APPENDIX F4

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MINES & QUARRIES INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
		TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	1.8	4.7	2.1	5.2	2.2	5.2	0.4	9.4	0.3	10.8	0.1	5.2
21	NATURAL SCI.	3.3	8.6	3.5	8.6	3.6	8.6	0.3	8.5	0.3	8.5	0.1	8.6
23	SOCIAL SCI.	0.2	0.4	0.2	0.5	0.2	0.5	0.1	1.7	0.1	2.1	0.0	0.5
27	TEACHING	0.1	0.4	0.2	0.4	0.2	0.4	0.1	1.3	0.0	1.6	0.0	0.4
31	MEDICINE	0.1	0.4	0.1	0.4	0.1	0.4	0.0	0.4	0.0	0.4	0.0	0.4
33	ARTIST	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
41	CLERICAL	2.9	7.7	3.2	7.9	3.3	7.9	0.4	9.7	0.3	10.4	0.1	7.9
51	SALES	0.1	0.4	0.2	0.4	0.2	0.4	0.0	0.4	0.0	0.4	0.0	0.4
61	SERVICE	0.8	2.2	1.0	2.4	1.0	2.4	0.2	3.8	0.1	4.3	0.0	2.4
71	FARMING	0.1	0.3	0.1	0.3	0.1	0.3	0.0	0.5	0.0	0.5	0.0	0.3
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
77	MINING	15.8	41.7	17.1	41.7	17.5	41.7	1.7	41.7	1.2	41.7	0.4	41.7
81	PROCESSING	1.9	4.9	2.0	4.9	2.0	4.9	0.2	4.5	0.1	4.4	0.0	4.9
83	MACHINING	1.0	2.7	1.0	2.6	1.1	2.6	0.0	1.0	0.0	0.4	0.0	2.6
85	FABRICATING	3.8	10.0	4.2	10.4	4.4	10.4	0.6	13.8	0.4	15.0	0.1	10.4
87	CONSTRUCTION	2.1	5.6	2.3	5.5	2.3	5.5	0.2	4.5	0.1	4.1	0.1	5.5
91	TRANSPORTATION	1.5	4.0	1.4	3.4	1.4	3.4	-0.1	-2.2	-0.1	-4.0	0.0	3.4
93	MAT. HANDLING	1.2	3.3	1.2	2.9	1.2	2.9	-0.0	-0.6	-0.1	-1.7	0.0	2.9
95	OTHER CRAFTS	0.3	0.8	0.3	0.7	0.3	0.7	-0.0	-0.5	-0.0	-1.0	0.0	0.7
99	OTHER OCC.	0.7	1.9	0.8	1.9	0.8	1.9	0.1	1.9	0.1	1.9	0.0	1.9
	TOTAL	38.0	100.0	41.0	100.0	42.0	100.0	4.0	100.0	3.0	100.0	1.0	100.0

APPENDIX F5

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FOOD, FEED, BEVERAGE & TOBACCO INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	9.8	10.1	11.5	11.2	12.1	11.2	2.4	21.6	1.7	34.1	0.7	11.2
21	NATURAL SCI.	2.9	3.0	3.4	3.3	3.6	3.3	0.7	6.6	0.5	10.6	0.2	3.3
23	SOCIAL SCI.	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.7	0.1	1.2	0.0	0.3
27	TEACHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	MEDICINE	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.2	0.0	0.2
33	ARTIST	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.4	0.0	0.6	0.0	0.2
41	CLERICAL	14.8	15.2	15.6	15.3	16.6	15.3	1.8	16.2	0.9	17.2	0.9	15.3
51	SALES	7.8	8.1	6.7	6.6	7.1	6.6	-0.7	-6.5	-1.1	-22.2	0.4	6.6
61	SERVICE	3.5	3.6	3.8	3.7	4.0	3.7	0.5	4.7	0.3	5.9	0.2	3.7
71	FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	FISHING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.1
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
81	PROCESSING	30.4	31.3	31.3	30.7	33.1	30.7	2.8	25.3	0.9	18.9	1.8	30.7
83	MACHINING	0.5	0.5	0.3	0.3	0.3	0.3	-0.2	-1.8	-0.2	-4.3	0.0	0.3
85	FABRICATING	4.3	4.4	5.0	4.9	5.3	4.9	1.0	9.4	0.7	14.7	0.3	4.9
87	CONSTRUCTION	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	-0.0	-0.6	0.0	0.6
91	TRANSPORTATION	4.5	4.7	4.8	4.7	5.1	4.7	0.5	4.7	0.2	4.7	0.3	4.7
93	MAT. HANDLING	12.2	12.6	13.0	12.7	13.7	12.7	1.5	14.0	0.8	15.6	0.8	12.7
95	OTHER CRAFTS	0.9	0.9	0.8	0.8	0.9	0.8	-0.0	-0.1	-0.1	-1.2	0.0	0.8
99	OTHER OCC.	4.1	4.3	4.4	4.3	4.6	4.3	0.5	4.3	0.2	4.3	0.3	4.3
	TOTAL	97.0	100.0	102.0	100.0	108.0	100.0	11.0	100.0	5.0	100.0	6.0	100.0

APPENDIX F6

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TEXTILE & CLOTHING INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	3.7	5.3	4.2	6.1	4.2	6.1	0.6		0.6		0.0	
21	NATURAL SCI.	1.2	1.7	1.2	1.8	1.2	1.8	0.0		0.0		0.0	
23	SOCIAL SCI.	0.0	0.1	0.0	0.1	0.0	0.1	0.0		0.0		0.0	
27	TEACHING	0.1	0.2	0.2	0.3	0.2	0.3	0.0		0.0		0.0	
31	MEDICINE	0.1	0.2	0.1	0.2	0.1	0.2	0.0		0.0		0.0	
33	ARTIST	0.7	1.0	0.8	1.1	0.8	1.1	0.1		0.1		0.0	
41	CLERICAL	7.6	10.8	7.5	10.7	7.5	10.7	-0.1		-0.1		0.0	
51	SALES	1.9	2.8	1.7	2.4	1.7	2.4	-0.3		-0.3		0.0	
61	SERVICE	1.5	2.2	1.2	1.7	1.2	1.7	-0.3		-0.3		0.0	
71	FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
81	PROCESSING	11.5	16.5	11.5	16.5	11.5	16.5	0.0		0.0		0.0	
83	MACHINING	0.7	1.0	0.6	0.9	0.6	0.9	-0.1		-0.1		0.0	
85	FABRICATING	34.6	49.4	34.6	49.4	34.6	49.4	0.0		0.0		0.0	
87	CONSTRUCTION	0.3	0.4	0.2	0.3	0.2	0.3	-0.1		-0.1		0.0	
91	TRANSPORTATION	0.3	0.5	0.3	0.5	0.3	0.5	-0.0		-0.0		0.0	
93	MAT. HANDLING	2.8	4.0	3.0	4.3	3.0	4.3	0.2		0.2		0.0	
95	OTHER CRAFTS	0.4	0.5	0.3	0.4	0.3	0.4	-0.1		-0.1		0.0	
99	OTHER OCC.	2.4	3.4	2.4	3.4	2.4	3.4	0.0		0.0		0.0	
	TOTAL	70.0	100.0	70.0	100.0	70.0	100.0	-0.0		-0.0		0.0	

APPENDIX F7

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE WOOD & FURNITURE INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
		TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	3.7	6.4	4.6	7.5	5.0	7.5	1.3	14.6	0.9	28.7	0.4	7.5
21	NATURAL SCI.	0.5	0.9	0.6	0.9	0.6	0.9	0.1	1.0	0.0	1.0	0.1	0.9
23	SOCIAL SCI.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0
27	TEACHING	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.4	0.0	0.1
31	MEDICINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	ARTIST	0.2	0.4	0.2	0.4	0.3	0.4	0.0	0.5	0.0	0.7	0.0	0.4
41	CLERICAL	5.6	9.6	5.8	9.5	6.3	9.5	0.8	8.6	0.2	6.8	0.6	9.5
51	SALES	1.3	2.2	0.9	1.5	1.0	1.5	-0.2	-2.7	-0.3	-11.2	0.1	1.5
61	SERVICE	0.6	1.0	0.5	0.8	0.6	0.8	-0.0	-0.1	-0.1	-2.1	0.1	0.8
71	FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0
75	FORESTRY	1.2	2.1	1.3	2.2	1.5	2.2	0.3	2.9	0.1	4.3	0.1	2.2
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	6.5	11.1	7.0	11.5	7.7	11.5	1.3	14.2	0.6	19.5	0.7	11.5
83	MACHINING	4.5	7.7	3.9	6.4	4.3	6.4	-0.1	-1.6	-0.5	-17.6	0.4	6.4
85	FABRICATING	23.8	41.0	25.4	41.7	27.9	41.7	4.1	46.0	1.6	54.6	2.5	41.7
87	CONSTRUCTION	2.6	4.5	2.6	4.2	2.8	4.2	0.2	2.2	-0.1	-1.8	0.3	4.2
91	TRANSPORTATION	1.2	2.1	1.2	1.9	1.3	1.9	0.0	0.4	-0.1	-2.5	0.1	1.9
93	MAT. HANDLING	3.6	6.3	4.2	6.9	4.6	6.9	1.0	10.7	0.5	18.3	0.4	6.9
95	OTHER CRAFTS	0.2	0.3	0.1	0.1	0.1	0.1	-0.1	-1.1	-0.1	-3.6	0.0	0.1
99	OTHER OCC.	2.4	4.1	2.5	4.1	2.8	4.1	0.4	4.1	0.1	4.1	0.2	4.1
	TOTAL	58.0	100.0	61.0	100.0	67.0	100.0	9.0	100.0	3.0	100.0	6.0	100.0

APPENDIX F8

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PAPER & ALLIED INDUSTRIES INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	10.5	8.9	12.1	9.8	12.8	9.8	2.3	19.3	1.6	32.6	0.7	9.8
21	NATURAL SCI.	3.1	2.6	3.4	2.7	3.6	2.7	0.4	3.7	0.2	4.9	0.2	2.7
23	SOCIAL SCI.	0.3	0.2	0.3	0.3	0.4	0.3	0.1	0.8	0.1	1.5	0.0	0.3
25	RELIGION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.5	0.0	0.1
31	MEDICINE	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
33	ARTIST	7.3	6.2	7.7	6.3	8.2	6.3	0.9	7.5	0.5	9.1	0.4	6.3
41	CLERICAL	21.2	18.0	21.1	17.1	22.3	17.1	1.1	9.1	-0.1	-2.2	1.2	17.1
51	SALES	7.9	6.7	8.9	7.3	9.4	7.3	1.5	12.7	1.0	20.3	0.5	7.3
61	SERVICE	1.6	1.4	1.5	1.2	1.6	1.2	-0.0	-0.3	-0.1	-2.5	0.1	1.2
71	FARMING	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0
75	FORESTRY	0.6	0.5	0.5	0.4	0.5	0.4	-0.1	-1.2	-0.2	-3.3	0.0	0.4
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
81	PROCESSING	14.4	12.2	16.1	13.1	17.0	13.1	2.6	21.7	1.7	33.7	0.9	13.1
83	MACHINING	1.6	1.4	1.3	1.1	1.4	1.1	-0.2	-2.0	-0.3	-6.3	0.1	1.1
85	FABRICATING	10.3	8.7	10.1	8.2	10.7	8.2	0.4	3.6	-0.1	-2.9	0.6	8.2
87	CONSTRUCTION	1.8	1.5	1.6	1.3	1.7	1.3	-0.1	-0.8	-0.2	-3.7	0.1	1.3
91	TRANSPORTATION	2.0	1.7	2.0	1.6	2.1	1.6	0.0	0.4	-0.1	-1.3	0.1	1.6
93	MAT. HANDLING	5.0	4.2	5.0	4.1	5.3	4.1	0.3	2.8	0.0	0.9	0.3	4.1
95	OTHER CRAFTS	27.1	23.0	27.9	22.7	29.5	22.7	2.4	19.8	0.8	15.8	1.6	22.7
99	OTHER OCC.	3.0	2.5	3.1	2.5	3.3	2.5	0.3	2.5	0.1	2.5	0.2	2.5
	TOTAL	118.0	100.0	123.0	100.0	130.0	100.0	12.0	100.0	5.0	100.0	7.0	100.0

APPENDIX F9

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PRIMARY METAL & METAL FABRICATING INDUSTRY, ONTARIO, 1985 - 1995

	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
	1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11 MAN. & ADMIN.	8.6	5.6	10.1	6.1	10.7	6.1	1.9	7.9	1.2	9.5	0.7	6.1
21 NATURAL SCI.	8.1	5.3	10.0	6.1	10.7	6.1	2.6	10.6	1.9	14.5	0.7	6.1
23 SOCIAL SCI.	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.2	0.0	0.2	0.0	0.1
27 TEACHING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.3	0.0	0.1
31 MEDICINE	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.0	-0.0	-0.0	0.0	0.1
33 ARTIST	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0.3	0.0	0.4	0.0	0.2
41 CLERICAL	15.9	10.5	17.4	10.5	18.5	10.5	2.6	10.8	1.4	11.0	1.2	10.5
51 SALES	2.5	1.6	2.3	1.4	2.4	1.4	-0.0	-0.1	-0.2	-1.4	0.2	1.4
61 SERVICE	1.9	1.2	1.9	1.1	2.0	1.1	0.1	0.5	-0.0	-0.0	0.1	1.1
71 FARMING	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.1
75 FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77 MINING	0.6	0.4	0.6	0.3	0.6	0.3	-0.0	-0.0	-0.0	-0.4	0.0	0.3
81 PROCESSING	31.6	20.8	34.0	20.6	36.3	20.6	4.7	19.4	2.4	18.4	2.3	20.6
83 MACHINING	42.7	28.1	46.1	28.0	49.2	28.0	6.6	27.3	3.5	26.8	3.1	28.0
85 FABRICATING	15.7	10.3	17.6	10.7	18.8	10.7	3.1	12.8	1.9	14.5	1.2	10.7
87 CONSTRUCTION	4.2	2.8	3.9	2.4	4.2	2.4	-0.0	-0.1	-0.3	-2.3	0.3	2.4
91 TRANSPORTATION	2.5	1.7	2.8	1.7	3.0	1.7	0.5	2.0	0.3	2.3	0.2	1.7
93 MAT. HANDLING	9.4	6.2	9.7	5.9	10.3	5.9	1.0	4.0	0.3	2.4	0.6	5.9
95 OTHER CRAFTS	1.0	0.6	0.9	0.6	1.0	0.6	0.0	0.1	-0.0	-0.3	0.1	0.6
99 OTHER OCC.	6.4	4.2	6.9	4.2	7.3	4.2	1.0	4.0	0.5	3.9	0.5	4.2
TOTAL	152.0	100.0	165.0	100.0	176.0	100.0	24.0	100.0	13.0	100.0	11.0	100.0

APPENDIX F10

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MOTOR VEHICLES & PARTS INDUSTRY, ONTARIO, 1985 - 1995-

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	6.5	6.3	7.8	7.5	8.1	7.5	1.7	28.0	1.4	68.9	0.3	7.5
21	NATURAL SCI.	6.1	6.0	7.6	7.3	7.9	7.3	1.8	29.9	1.5	75.1	0.3	7.3
23	SOCIAL SCI.	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
27	TEACHING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.4	0.0	0.1
31	MEDICINE	0.3	0.3	0.4	0.4	0.4	0.4	0.1	1.1	0.1	2.6	0.0	0.4
33	ARTIST	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.7	0.0	0.1
41	CLERICAL	11.6	11.3	11.0	10.6	11.4	10.6	-0.1	-2.1	-0.5	-27.4	0.4	10.6
51	SALES	1.0	1.0	0.8	0.7	0.8	0.7	-0.3	-4.4	-0.3	-14.6	0.0	0.7
61	SERVICE	2.4	2.4	2.2	2.1	2.3	2.1	-0.1	-1.8	-0.2	-9.6	0.1	2.1
71	FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0
81	PROCESSING	2.0	2.0	1.8	1.7	1.8	1.7	-0.2	-2.9	-0.2	-12.2	0.1	1.7
83	MACHINING	17.2	16.8	16.9	16.3	17.6	16.3	0.4	6.6	-0.3	-12.6	0.7	16.3
85	FABRICATING	42.0	41.2	42.9	41.2	44.5	41.2	2.5	41.2	0.8	41.2	1.6	41.2
87	CONSTRUCTION	1.7	1.6	1.3	1.2	1.3	1.2	-0.3	-5.4	-0.4	-18.6	0.0	1.2
91	TRANSPORTATION	0.9	0.9	0.7	0.6	0.7	0.6	-0.2	-3.5	-0.2	-11.7	0.0	0.6
93	MAT. HANDLING	5.2	5.1	5.4	5.2	5.6	5.2	0.4	6.9	0.2	10.3	0.2	5.2
95	OTHER CRAFTS	0.5	0.5	0.6	0.5	0.6	0.5	0.1	1.2	0.1	2.5	0.0	0.5
99	OTHER OCC.	4.2	4.2	4.3	4.2	4.5	4.2	0.2	4.2	0.1	4.2	0.2	4.2
	TOTAL	102.0	100.0	104.0	100.0	108.0	100.0	6.0	100.0	2.0	100.0	4.0	100.0

APPENDIX F11

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE MACHINERY & OTHER TRANSPORTATION INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	9.4	10.4	9.5	9.5	9.9	9.5	0.5	3.5	0.1	0.6	0.5	9.5
21	NATURAL SCI.	10.2	11.3	12.6	12.6	13.3	12.6	3.1	20.8	2.5	24.8	0.6	12.6
23	SOCIAL SCI.	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.2	0.0	0.2	0.0	0.2
27	TEACHING	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.4	0.0	0.5	0.0	0.2
31	MEDICINE	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
33	ARTIST	0.4	0.4	0.6	0.6	0.6	0.6	0.2	1.6	0.2	2.1	0.0	0.6
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	12.8	14.2	13.6	13.6	14.3	13.6	1.5	9.8	0.8	7.8	0.7	13.6
51	SALES	2.7	3.0	2.8	2.8	3.0	2.8	0.2	1.6	0.1	0.9	0.1	2.8
61	SERVICE	1.1	1.2	1.5	1.5	1.5	1.5	0.4	2.9	0.4	3.6	0.1	1.5
71	FARMING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.2	0.0	0.1
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	MINING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.4	0.0	0.1
81	PROCESSING	1.7	1.9	1.3	1.3	1.3	1.3	-0.4	-2.5	-0.4	-4.4	0.1	1.3
83	MACHINING	20.6	22.9	25.3	25.3	26.6	25.3	5.9	39.7	4.7	46.9	1.3	25.3
85	FABRICATING	23.7	26.3	24.4	24.4	25.6	24.4	1.9	12.8	0.7	7.0	1.2	24.4
87	CONSTRUCTION	1.8	2.0	2.0	2.0	2.1	2.0	0.3	2.0	0.2	2.0	0.1	2.0
91	TRANSPORTATION	0.7	0.7	0.7	0.7	0.8	0.7	0.1	0.7	0.1	0.7	0.0	0.7
93	MAT. HANDLING	1.8	1.9	1.8	1.8	1.8	1.8	0.1	0.6	-0.0	-0.1	0.1	1.7
95	OTHER CRAFTS	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	-0.0	-0.1	0.0	0.3
99	OTHER OCC.	2.3	2.6	3.0	3.0	3.1	3.0	0.8	5.5	0.7	6.7	0.1	3.0
	TOTAL	90.0	100.0	100.0	100.0	105.0	100.0	15.0	100.0	10.0	100.0	5.0	100.0

APPENDIX F12

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRICAL PRODUCTS INDUSTRY, ONTARIO, 1985 - 1995

		EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE	OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	8.9	9.9	10.0	10.3	10.5	10.3	1.6	13.6	1.1	15.9	0.5	10.3
21	NATURAL SCI.	12.6	14.0	14.8	15.3	15.6	15.3	3.0	24.6	2.2	31.3	0.8	15.3
23	SOCIAL SCI.	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.5	0.0	0.7	0.0	0.3
27	TEACHING	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.2	0.0	0.3	0.0	0.1
31	MEDICINE	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.5	0.0	0.6	0.0	0.2
33	ARTIST	0.3	0.3	0.3	0.4	0.4	0.4	0.1	0.7	0.1	0.9	0.0	0.4
41	CLERICAL	13.0	14.5	13.9	14.3	14.6	14.3	1.6	13.1	0.9	12.3	0.7	14.3
51	SALES	1.8	2.0	1.6	1.7	1.7	1.7	-0.1	-0.9	-0.2	-2.8	0.1	1.7
61	SERVICE	0.7	0.7	0.6	0.6	0.6	0.6	-0.0	-0.3	-0.1	-0.9	0.0	0.6
71	FARMING	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.1
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	3.2	3.5	3.9	4.0	4.1	4.0	0.9	7.5	0.7	10.1	0.2	4.0
83	MACHINING	6.9	7.7	6.9	7.1	7.2	7.1	0.3	2.6	-0.0	-0.6	0.4	7.1
85	FABRICATING	34.1	37.9	36.1	37.3	38.0	37.3	3.9	32.7	2.1	29.4	1.9	37.3
87	CONSTRUCTION	1.9	2.1	1.6	1.7	1.7	1.7	-0.2	-1.8	-0.3	-4.2	0.1	1.7
91	TRANSPORTATION	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.1	-0.0	-0.1	0.0	0.3
93	MAT. HANDLING	2.5	2.8	2.8	2.8	2.9	2.8	0.4	3.4	0.3	3.7	0.1	2.8
95	OTHER CRAFTS	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.2	-0.0	-0.0	0.0	0.5
99	OTHER OCC.	2.7	3.0	3.0	3.0	3.1	3.0	0.4	3.3	0.2	3.4	0.2	3.1
	TOTAL	90.0	100.0	97.0	100.0	102.0	100.0	12.0	100.0	7.0	100.0	5.0	100.0

APPENDIX F13

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CHEMICAL, RUBBER & PETROLEUM INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
		TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	13.5	13.0	15.1	13.8	15.5	13.8	2.0	24.9	1.6	31.5	0.4	13.8
21	NATURAL SCI.	11.7	11.2	13.7	12.5	14.0	12.5	2.4	29.4	2.0	39.6	0.4	12.5
23	SOCIAL SCI.	0.6	0.5	0.7	0.7	0.8	0.7	0.2	2.5	0.2	3.6	0.0	0.7
27	TEACHING	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.9	0.1	1.3	0.0	0.2
31	MEDICINE	1.0	0.9	1.2	1.1	1.3	1.1	0.3	3.6	0.3	5.1	0.0	1.1
33	ARTIST	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.2	0.0	0.2
41	CLERICAL	14.5	13.9	15.7	14.4	16.2	14.4	1.7	21.2	1.3	25.2	0.4	14.4
51	SALES	3.5	3.3	2.2	2.0	2.3	2.0	-1.2	-15.3	-1.3	-25.7	0.1	2.0
61	SERVICE	1.2	1.2	0.9	0.9	1.0	0.9	-0.2	-3.0	-0.3	-5.4	0.0	0.9
71	FARMING	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.3	0.0	0.4	0.0	0.2
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	MINING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
81	PROCESSING	15.9	15.3	16.7	15.3	17.1	15.3	1.2	14.9	0.7	14.7	0.5	15.3
83	MACHINING	3.7	3.5	4.1	3.8	4.3	3.8	0.6	7.2	0.5	9.2	0.1	3.8
85	FABRICATING	21.8	21.0	21.7	19.9	22.3	19.9	0.5	6.1	-0.1	-2.1	0.6	19.9
87	CONSTRUCTION	1.9	1.8	1.9	1.8	2.0	1.8	0.1	1.0	0.0	0.5	0.1	1.8
91	TRANSPORTATION	1.5	1.4	1.5	1.4	1.5	1.4	0.0	0.2	-0.0	-0.5	0.0	1.4
93	MAT. HANDLING	6.5	6.2	6.4	5.8	6.5	5.8	0.1	0.9	-0.1	-2.1	0.2	5.8
95	OTHER CRAFTS	1.5	1.4	1.5	1.4	1.5	1.4	0.0	0.5	-0.0	-0.1	0.0	1.4
99	OTHER OCC.	4.6	4.4	4.8	4.4	4.9	4.4	0.4	4.4	0.2	4.4	0.1	4.4
	TOTAL	104.0	100.0	109.0	100.0	112.0	100.0	8.0	100.0	5.0	100.0	3.0	100.0

APPENDIX F14

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE NON-METALLIC MINERAL PRODUCTS INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	2.6	9.8	3.1	11.0	3.2	11.0	0.6	28.1	0.5	45.2	0.1	11.0
21	NATURAL SCI.	1.3	4.9	1.5	5.3	1.5	5.3	0.2	10.3	0.2	15.3	0.1	5.3
23	SOCIAL SCI.	0.1	0.2	0.1	0.3	0.1	0.3	0.0	1.5	0.0	2.7	0.0	0.3
27	TEACHING	0.1	0.4	0.1	0.5	0.2	0.5	0.0	2.3	0.0	4.0	0.0	0.5
31	MEDICINE	0.1	0.2	0.1	0.3	0.1	0.3	0.0	1.1	0.0	1.9	0.0	0.3
33	ARTIST	0.2	0.6	0.2	0.7	0.2	0.7	0.0	2.4	0.0	4.0	0.0	0.7
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	3.3	12.1	3.4	12.1	3.5	12.1	0.2	12.4	0.1	12.7	0.1	12.1
51	SALES	0.9	3.5	0.9	3.3	1.0	3.3	0.0	0.3	-0.0	-2.7	0.0	3.3
61	SERVICE	0.2	0.9	0.1	0.4	0.1	0.4	-0.1	-5.3	-0.1	-11.1	0.0	0.4
71	FARMING	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.0
77	MINING	0.2	0.6	0.2	0.6	0.2	0.6	0.0	0.8	0.0	1.0	0.0	0.6
81	PROCESSING	5.6	20.8	5.6	20.1	5.8	20.1	0.2	10.4	0.0	0.7	0.2	20.1
83	MACHINING	2.7	9.9	2.9	10.5	3.0	10.5	0.4	18.4	0.3	26.3	0.1	10.5
85	FABRICATING	2.0	7.4	2.0	7.2	2.1	7.2	0.1	5.0	0.0	2.7	0.1	7.2
87	CONSTRUCTION	1.7	6.1	1.5	5.4	1.6	5.4	-0.1	-4.0	-0.1	-13.5	0.1	5.4
91	TRANSPORTATION	2.3	8.4	2.3	8.2	2.4	8.2	0.1	5.3	0.0	2.5	0.1	8.2
93	MAT. HANDLING	2.3	8.6	2.4	8.4	2.4	8.4	0.1	6.2	0.0	4.0	0.1	8.4
95	OTHER CRAFTS	0.2	0.8	0.2	0.7	0.2	0.7	-0.0	-0.0	-0.0	-0.7	0.0	0.7
99	OTHER OCC.	1.3	4.8	1.3	4.8	1.4	4.8	0.1	4.8	0.0	4.8	0.0	4.8
	TOTAL	27.0	100.0	28.0	100.0	29.0	100.0	2.0	100.0	1.0	100.0	1.0	100.0

APPENDIX F15

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE OTHER MANUFACTURING INDUSTRIES, ONTARIO, 1985 - 1995

	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
	1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11 MAN. & ADMIN.	5.2	8.6	6.9	10.1	7.4	10.1	2.2	18.0	1.7	23.6	0.5	10.1
21 NATURAL SCI.	2.4	4.0	2.7	3.9	2.9	3.9	0.5	3.8	0.3	3.6	0.2	3.9
23 SOCIAL SCI.	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.4	0.0	0.5	0.0	0.2
27 TEACHING	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.3	0.0	0.3	0.0	0.2
31 MEDICINE	1.8	3.0	2.3	3.4	2.5	3.4	0.6	5.3	0.5	6.7	0.2	3.4
33 ARTIST	1.2	1.9	1.4	2.0	1.5	2.0	0.3	2.5	0.2	2.8	0.1	2.0
41 CLERICAL	9.6	15.7	10.1	14.8	10.8	14.8	1.2	10.4	0.5	7.2	0.7	14.8
51 SALES	2.3	3.7	1.9	2.8	2.1	2.8	-0.2	-1.5	-0.3	-4.6	0.1	2.8
61 SERVICE	0.6	1.0	0.6	0.8	0.6	0.8	-0.0	-0.0	-0.0	-0.6	0.0	0.8
71 FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77 MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
81 PROCESSING	2.7	4.4	2.7	3.9	2.9	3.9	0.2	1.3	-0.0	-0.6	0.2	3.9
83 MACHINING	2.5	4.1	2.5	3.7	2.7	3.7	0.2	2.0	0.1	0.7	0.2	3.7
85 FABRICATING	25.3	41.5	28.9	42.5	31.0	42.5	5.7	47.3	3.6	50.8	2.1	42.5
87 CONSTRUCTION	0.6	1.0	0.6	0.8	0.6	0.8	0.0	0.2	-0.0	-0.3	0.0	0.8
91 TRANSPORTATION	0.4	0.7	0.5	0.7	0.5	0.7	0.1	0.6	0.0	0.6	0.0	0.7
93 MAT. HANDLING	2.1	3.4	2.3	3.3	2.4	3.3	0.3	2.7	0.2	2.3	0.2	3.3
95 OTHER CRAFTS	1.1	1.8	1.2	1.8	1.3	1.8	0.2	1.9	0.1	1.9	0.1	1.8
99 OTHER OCC.	2.9	4.8	3.3	4.8	3.5	4.8	0.6	4.8	0.3	4.8	0.2	4.8
TOTAL	61.0	100.0	68.0	100.0	73.0	100.0	12.0	100.0	7.0	100.0	5.0	100.0

APPENDIX F16

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE CONSTRUCTION INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	16.4	7.9	19.5	8.9	21.1	8.9	4.7	16.2	3.2	26.6	1.5	8.9
21	NATURAL SCI.	4.7	2.3	4.6	2.1	5.0	2.1	0.3	1.0	-0.1	-0.6	0.4	2.1
23	SOCIAL SCI.	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0
25	RELIGION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	TEACHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
31	MEDICINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	ARTIST	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.0	-0.0	-0.1	0.0	0.1
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	19.8	9.5	22.2	10.1	23.9	10.1	4.1	14.2	2.4	20.1	1.7	10.1
51	SALES	2.9	1.4	3.0	1.4	3.2	1.4	0.3	1.0	0.1	0.5	0.2	1.4
61	SERVICE	2.0	0.9	1.9	0.8	2.0	0.8	0.0	0.1	-0.1	-1.0	0.1	0.8
71	FARMING	7.4	3.5	8.3	3.8	8.9	3.8	1.6	5.4	0.9	7.8	0.6	3.8
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
77	MINING	0.5	0.2	0.1	0.0	0.1	0.0	-0.3	-1.2	-0.4	-2.9	0.0	0.0
81	PROCESSING	1.2	0.6	1.3	0.6	1.4	0.6	0.2	0.6	0.1	0.6	0.1	0.6
83	MACHINING	6.7	3.2	5.9	2.7	6.3	2.7	-0.4	-1.3	-0.8	-6.9	0.5	2.7
85	FABRICATING	8.9	4.3	9.8	4.4	10.5	4.4	1.7	5.8	0.9	7.6	0.8	4.4
87	CONSTRUCTION	126.0	60.6	133.1	60.5	143.3	60.5	17.3	59.8	7.0	58.7	10.3	60.5
91	TRANSPORTATION	5.1	2.5	4.3	2.0	4.6	2.0	-0.5	-1.8	-0.9	-7.1	0.3	2.0
93	MAT. HANDLING	1.6	0.8	1.0	0.5	1.1	0.5	-0.6	-1.9	-0.6	-5.2	0.1	0.5
95	OTHER CRAFTS	0.4	0.2	0.4	0.2	0.4	0.2	-0.0	-0.0	-0.0	-0.3	0.0	0.2
99	OTHER OCC.	3.9	1.9	4.1	1.9	4.4	1.9	0.5	1.9	0.2	1.9	0.3	1.9
	TOTAL	208.0	100.0	220.0	100.0	237.0	100.0	29.0	100.0	12.0	100.0	17.0	100.0

APPENDIX F17

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE ELECTRIC POWER & GAS UTILITIES INDUSTRY, ONTARIO, 1985 - 1995

		EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
		1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE	OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11	MAN. & ADMIN.	3.4	7.4	4.0	8.3	4.5	8.3	1.0	13.1	0.6	27.6	0.5	8.3
21	NATURAL SCI.	7.3	15.8	7.7	16.0	8.7	16.0	1.4	17.2	0.4	20.8	1.0	16.0
23	SOCIAL SCI.	0.1	0.3	0.1	0.3	0.1	0.3	0.0	0.3	0.0	0.3	0.0	0.3
27	TEACHING	0.2	0.5	0.3	0.5	0.3	0.5	0.1	0.9	0.0	2.2	0.0	0.5
31	MEDICINE	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
33	ARTIST	0.1	0.2	0.1	0.2	0.1	0.2	0.0	0.2	0.0	0.2	0.0	0.2
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0
41	CLERICAL	8.5	18.5	8.3	17.2	9.3	17.2	0.8	9.9	-0.2	-11.8	1.0	17.2
51	SALES	0.3	0.6	0.0	0.0	0.0	0.0	-0.2	-3.1	-0.2	-12.5	0.0	0.0
61	SERVICE	0.8	1.7	0.6	1.3	0.7	1.3	-0.1	-0.8	-0.1	-7.1	0.1	1.3
71	FARMING	0.2	0.4	0.2	0.4	0.2	0.4	0.0	0.4	0.0	0.4	0.0	0.4
75	FORESTRY	0.2	0.4	0.2	0.4	0.2	0.4	0.0	0.4	0.0	0.4	0.0	0.4
77	MINING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
81	PROCESSING	0.3	0.7	0.4	0.8	0.4	0.8	0.1	1.3	0.1	2.9	0.0	0.8
83	MACHINING	1.1	2.3	1.2	2.5	1.4	2.5	0.3	3.6	0.1	6.8	0.2	2.5
85	FABRICATING	2.9	6.3	3.0	6.3	3.4	6.3	0.5	6.3	0.1	6.4	0.4	6.3
87	CONSTRUCTION	10.8	23.4	11.7	24.4	13.2	24.4	2.4	29.9	0.9	46.5	1.5	24.4
91	TRANSPORTATION	1.7	3.8	1.8	3.7	2.0	3.7	0.3	3.3	0.0	2.0	0.2	3.7
93	MAT. HANDLING	1.6	3.4	1.6	3.3	1.8	3.3	0.2	2.5	0.0	0.1	0.2	3.3
95	OTHER CRAFTS	4.8	10.5	5.1	10.5	5.7	10.5	0.8	10.6	0.2	10.6	0.6	10.5
99	OTHER OCC.	1.7	3.6	1.8	3.6	2.0	3.6	0.3	3.6	0.1	3.6	0.2	3.6
	TOTAL	46.0	100.0	48.0	100.0	54.0	100.0	8.0	100.0	2.0	100.0	6.0	100.0

APPENDIX F18

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRANSPORTATION & STORAGE INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	9.0	5.7	11.3	6.6	12.2	6.6	3.2	12.2	2.3	17.7	0.9	6.6
21	NATURAL SCI.	2.2	1.4	2.2	1.3	2.4	1.3	0.1	0.6	-0.0	-0.2	0.2	1.3
23	SOCIAL SCI.	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.1
27	TEACHING	0.6	0.4	0.7	0.4	0.8	0.4	0.2	0.8	0.2	1.3	0.1	0.4
31	MEDICINE	1.2	0.8	1.6	0.9	1.7	0.9	0.5	2.1	0.4	3.2	0.1	0.9
33	ARTIST	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	29.4	18.7	33.4	19.6	36.0	19.6	6.5	25.1	4.0	30.6	2.6	19.6
51	SALES	2.3	1.5	2.4	1.4	2.6	1.4	0.3	1.1	0.1	0.8	0.2	1.4
61	SERVICE	6.4	4.1	6.8	4.0	7.3	4.0	0.9	3.4	0.4	2.8	0.5	4.0
71	FARMING	0.3	0.2	0.2	0.1	0.2	0.1	-0.0	-0.0	-0.0	-0.2	0.0	0.1
75	FORESTRY	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	MINING	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.4	0.2	0.3	0.2	0.4	0.2	0.0	0.0	-0.0	-0.2	0.0	0.2
83	MACHINING	0.9	0.6	0.8	0.5	0.9	0.5	-0.0	-0.1	-0.1	-0.7	0.1	0.5
85	FABRICATING	11.2	7.1	12.0	7.0	12.9	7.0	1.7	6.5	0.8	5.9	0.9	7.0
87	CONSTRUCTION	9.5	6.1	9.7	5.7	10.4	5.7	0.9	3.5	0.2	1.3	0.7	5.7
91	TRANSPORTATION	71.1	45.3	75.2	44.2	80.9	44.2	9.9	37.9	4.1	31.7	5.7	44.2
93	MAT. HANDLING	8.5	5.4	9.3	5.4	10.0	5.4	1.4	5.5	0.7	5.5	0.7	5.4
95	OTHER CRAFTS	0.6	0.4	0.3	0.2	0.4	0.2	-0.2	-0.8	-0.2	-1.8	0.0	0.2
99	OTHER OCC.	3.1	2.0	3.4	2.0	3.7	2.0	0.5	2.0	0.3	2.0	0.3	2.0
	TOTAL	157.0	100.0	170.0	100.0	183.0	100.0	26.0	100.0	13.0	100.0	13.0	100.0

APPENDIX F19

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNICATION INDUSTRY, ONTARIO, 1985 - 1995

	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
	1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11 MAN. & ADMIN.	10.7	11.2	12.4	11.9	13.5	11.9	2.8	15.7	1.7	19.4	1.1	11.9
21 NATURAL SCI.	6.3	6.6	7.5	7.2	8.2	7.2	1.9	10.4	1.2	13.6	0.7	7.2
23 SOCIAL SCI.	0.6	0.7	0.8	0.7	0.8	0.7	0.2	1.0	0.1	1.4	0.1	0.7
25 RELIGION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 TEACHING	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.1	-0.0	-0.2	0.0	0.4
31 MEDICINE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.0	0.4	0.0	0.1
33 ARTIST	7.6	8.0	8.3	8.0	9.0	8.0	1.4	8.0	0.7	8.1	0.7	8.0
37 SPORTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41 CLERICAL	47.4	49.8	51.5	49.5	55.9	49.5	8.6	47.6	4.1	45.7	4.5	49.5
51 SALES	3.0	3.1	3.9	3.8	4.2	3.8	1.3	7.1	0.9	10.4	0.3	3.7
61 SERVICE	1.0	1.1	0.9	0.8	0.9	0.8	-0.1	-0.4	-0.1	-1.6	0.1	0.8
71 FARMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
81 PROCESSING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.1
83 MACHINING	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
85 FABRICATING	2.5	2.6	2.7	2.6	2.9	2.6	0.4	2.4	0.2	2.3	0.2	2.6
87 CONSTRUCTION	10.8	11.4	11.1	10.6	12.0	10.6	1.2	6.7	0.3	2.8	1.0	10.7
91 TRANSPORTATION	0.4	0.4	0.3	0.3	0.3	0.3	-0.1	-0.6	-0.1	-1.5	0.0	0.3
93 MAT. HANDLING	0.9	0.9	0.6	0.5	0.6	0.5	-0.3	-1.4	-0.3	-3.4	0.0	0.5
95 OTHER CRAFTS	2.2	2.3	2.3	2.2	2.5	2.2	0.3	1.5	0.1	0.7	0.2	2.2
99 OTHER OCC.	1.0	1.0	1.1	1.0	1.2	1.0	0.2	1.2	0.1	1.4	0.1	1.1
TOTAL	95.0	100.0	104.0	100.0	113.0	100.0	18.0	100.0	9.0	100.0	9.0	100.0

APPENDIX F20

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE TRADE INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	48.5	7.1	63.5	8.5	67.7	8.5	19.2	17.4	14.9	24.9	4.3	8.5
21	NATURAL SCI.	7.2	1.1	8.9	1.2	9.5	1.2	2.2	2.0	1.6	2.7	0.6	1.2
23	SOCIAL SCI.	0.9	0.1	1.2	0.2	1.3	0.2	0.3	0.3	0.2	0.4	0.1	0.2
25	RELIGION	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	TEACHING	1.2	0.2	1.6	0.2	1.7	0.2	0.5	0.5	0.4	0.6	0.1	0.2
31	MEDICINE	8.0	1.2	9.3	1.2	9.9	1.2	2.0	1.8	1.3	2.2	0.6	1.2
33	ARTIST	4.8	0.7	5.4	0.7	5.7	0.7	0.9	0.8	0.6	0.9	0.4	0.7
37	SPORTS	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	CLERICAL	181.3	26.5	199.4	26.8	212.7	26.8	31.5	28.6	18.1	30.1	13.4	26.8
51	SALES	256.6	37.5	279.1	37.5	297.8	37.5	41.2	37.5	22.5	37.5	18.7	37.5
61	SERVICE	16.2	2.4	15.4	2.1	16.4	2.1	0.2	0.2	-0.8	-1.3	1.0	2.1
71	FARMING	1.2	0.2	0.8	0.1	0.9	0.1	-0.4	-0.3	-0.4	-0.7	0.1	0.1
73	FISHING	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	MINING	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	14.1	2.1	15.1	2.0	16.2	2.0	2.0	1.9	1.0	1.7	1.0	2.0
83	MACHINING	5.8	0.8	5.7	0.8	6.1	0.8	0.3	0.2	-0.1	-0.2	0.4	0.8
85	FABRICATING	77.7	11.3	78.9	10.6	84.2	10.6	6.6	6.0	1.3	2.1	5.3	10.6
87	CONSTRUCTION	5.9	0.9	5.9	0.8	6.3	0.8	0.4	0.4	-0.0	-0.0	0.4	0.8
91	TRANSPORTATION	19.8	2.9	19.2	2.6	20.5	2.6	0.8	0.7	-0.5	-0.9	1.3	2.6
93	MAT. HANDLING	17.7	2.6	16.2	2.2	17.3	2.2	-0.4	-0.4	-1.5	-2.5	1.1	2.2
95	OTHER CRAFTS	1.6	0.2	1.6	0.2	1.7	0.2	0.1	0.1	-0.0	-0.0	0.1	0.2
99	OTHER OCC.	16.0	2.3	17.4	2.3	18.6	2.3	2.6	2.3	1.4	2.3	1.2	2.3
	TOTAL	685.0	100.0	745.0	100.0	795.0	100.0	110.0	100.0	60.0	100.0	50.0	100.0

APPENDIX F21

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE FINANCE, INSURANCE & REAL ESTATE INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	46.7	18.5	49.2	18.9	52.0	18.9	5.3	24.2	2.5	35.5	2.8	18.9
21	NATURAL SCI.	8.9	3.5	12.6	4.8	13.3	4.8	4.5	20.3	3.7	53.3	0.7	4.9
23	SOCIAL SCI.	1.5	0.6	1.5	0.6	1.5	0.6	-0.0	-0.0	-0.1	-1.2	0.1	0.6
27	TEACHING	0.5	0.2	0.5	0.2	0.5	0.2	0.0	0.2	0.0	0.2	0.0	0.2
31	MEDICINE	0.2	0.1	0.2	0.1	0.2	0.1	-0.0	-0.2	-0.0	-0.7	0.0	0.1
33	ARTIST	0.9	0.4	0.9	0.3	0.9	0.3	0.0	0.1	-0.0	-0.4	0.1	0.3
37	SPORTS	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.4	0.0	0.0
41	CLERICAL	115.1	45.5	115.4	44.4	122.0	44.4	6.9	31.4	0.2	3.5	6.7	44.4
51	SALES	56.0	22.1	57.4	22.1	60.7	22.1	4.8	21.6	1.4	20.6	3.3	22.1
61	SERVICE	15.2	6.0	15.6	6.0	16.5	6.0	1.2	5.6	0.3	4.9	0.9	6.0
71	FARMING	0.7	0.3	0.6	0.3	0.7	0.3	-0.0	-0.1	-0.1	-0.8	0.0	0.3
75	FORESTRY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	MINING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.1
83	MACHINING	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.1
85	FABRICATING	0.9	0.3	0.6	0.2	0.6	0.2	-0.3	-1.3	-0.3	-4.5	0.0	0.2
87	CONSTRUCTION	1.8	0.7	1.4	0.5	1.5	0.5	-0.3	-1.4	-0.4	-5.6	0.1	0.5
91	TRANSPORTATION	0.4	0.1	0.2	0.1	0.2	0.1	-0.1	-0.6	-0.1	-2.1	0.0	0.1
93	MAT. HANDLING	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.1
95	OTHER CRAFTS	0.8	0.3	0.5	0.2	0.5	0.2	-0.3	-1.2	-0.3	-4.1	0.0	0.2
99	OTHER OCC.	2.8	1.1	2.8	1.1	3.0	1.1	0.2	1.0	0.1	0.7	0.2	1.1
	TOTAL	253.0	100.0	260.0	100.0	275.0	100.0	22.0	100.0	7.0	100.0	15.0	100.0

APPENDIX F22

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE COMMUNITY, BUSINESS & PERSONAL SERVICES INDUSTRY, ONTARIO, 1985 - 1995

	EMPLOYED LABOUR FORCE						EMPLOYMENT GROWTH					
	1985		1990		1995		1985-1995		1985-1990		1990-1995	
OCC. CODE OCCUPATION NAME	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL	TOTAL (000)	% OF TOTAL
11 MAN. & ADMIN.	84.7	6.3	101.3	6.8	122.0	7.1	37.3	9.7	16.6	10.4	20.7	9.2
21 NATURAL SCI.	53.7	4.0	73.8	4.9	93.5	5.4	39.8	10.3	20.1	12.5	19.7	8.8
23 SOCIAL SCI.	56.3	4.2	64.3	4.3	75.7	4.4	19.4	5.1	8.1	5.0	11.4	5.1
25 RELIGION	10.7	0.8	10.5	0.7	12.1	0.7	1.4	0.4	-0.2	-0.1	1.6	0.7
27 TEACHING	174.2	13.0	170.7	11.4	170.4	9.9	-3.8	-1.0	-3.5	-2.2	-0.3	-0.1
31 MEDICINE	162.1	12.1	160.2	10.7	184.2	10.7	22.1	5.7	-1.9	-1.2	24.0	10.7
33 ARTIST	32.2	2.4	39.0	2.6	46.4	2.7	14.2	3.7	6.8	4.3	7.4	3.3
37 SPORTS	10.7	0.8	12.0	0.8	15.5	0.9	4.8	1.2	1.3	0.8	3.5	1.6
41 CLERICAL	218.4	16.3	251.7	16.8	298.8	17.3	80.3	20.9	33.3	20.8	47.1	20.9
51 SALES	25.5	1.9	29.1	1.9	34.8	2.0	9.4	2.4	3.6	2.3	5.7	2.6
61 SERVICE	415.3	31.0	476.4	31.8	544.1	31.5	128.8	33.5	61.1	38.2	67.7	30.1
71 FARMING	9.4	0.7	10.5	0.7	12.1	0.7	2.7	0.7	1.1	0.7	1.6	0.7
73 FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75 FORESTRY	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77 MINING	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81 PROCESSING	4.0	0.3	4.5	0.3	5.2	0.3	1.2	0.3	0.5	0.3	0.7	0.3
83 MACHINING	5.4	0.4	6.0	0.4	6.9	0.4	1.5	0.4	0.6	0.4	0.9	0.4
85 FABRICATING	18.8	1.4	21.0	1.4	24.1	1.4	5.4	1.4	2.2	1.4	3.1	1.4
87 CONSTRUCTION	9.4	0.7	10.5	0.7	12.1	0.7	2.7	0.7	1.1	0.7	1.6	0.7
91 TRANSPORTATION	13.4	1.0	16.5	1.1	19.0	1.1	5.6	1.4	3.1	1.9	2.5	1.1
93 MAT. HANDLING	4.0	0.3	4.5	0.3	5.2	0.3	1.2	0.3	0.5	0.3	0.7	0.3
95 OTHER CRAFTS	9.1	0.7	10.2	0.7	11.7	0.7	2.6	0.7	1.1	0.7	1.5	0.7
99 OTHER OCC.	22.5	1.7	27.0	1.8	30.9	1.8	8.4	2.2	4.5	2.8	3.9	1.7
TOTAL	1340.0	100.0	1500.0	100.0	1725.0	100.0	385.0	100.0	160.0	100.0	225.0	100.0

APPENDIX F23

EMPLOYMENT BY 2-DIGIT OCCUPATIONAL GROUPS IN THE PUBLIC ADMINISTRATION INDUSTRY, ONTARIO, 1985 - 1995

OCC. CODE	OCCUPATION NAME	EMPLOYED LABOUR FORCE 1985 TOTAL (000)	1985 % OF TOTAL	1990 TOTAL (000)	1990 % OF TOTAL	1995 TOTAL (000)	1995 % OF TOTAL	EMPLOYMENT GROWTH 1985-1995 TOTAL (000)	1985-1995 % OF TOTAL	1985-1990 TOTAL (000)	1985-1990 % OF TOTAL	1990-1995 TOTAL (000)	1990-1995 % OF TOTAL
11	MAN. & ADMIN.	49.7	18.4	52.6	18.8	55.4	18.8	5.8	23.0	2.9	29.3	2.8	18.8
21	NATURAL SCI.	23.8	8.8	25.6	9.1	27.0	9.1	3.1	12.6	1.8	17.8	1.4	9.1
23	SOCIAL SCI.	13.3	4.9	15.7	5.6	16.5	5.6	3.2	12.7	2.3	23.4	0.8	5.6
25	RELIGION	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	TEACHING	2.4	0.9	2.4	0.9	2.6	0.9	0.1	0.5	0.0	0.1	0.1	0.9
31	MEDICINE	3.1	1.1	2.5	0.9	2.7	0.9	-0.4	-1.8	-0.6	-5.8	0.1	0.9
33	ARTIST	2.7	1.0	3.1	1.1	3.2	1.1	0.5	2.1	0.4	3.5	0.2	1.1
37	SPORTS	1.7	0.6	2.0	0.7	2.1	0.7	0.4	1.6	0.3	2.9	0.1	0.7
41	CLERICAL	79.1	29.3	80.1	28.6	84.4	28.6	5.4	21.5	1.1	10.8	4.3	28.6
51	SALES	0.9	0.3	1.1	0.4	1.2	0.4	0.3	1.0	0.2	2.0	0.1	0.4
61	SERVICE	62.7	23.2	66.6	23.8	70.2	23.8	7.5	30.1	3.9	39.4	3.6	23.8
71	FARMING	4.6	1.7	4.7	1.7	5.0	1.7	0.4	1.6	0.1	1.4	0.3	1.7
73	FISHING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	FORESTRY	0.3	0.1	0.3	0.1	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.1
77	MINING	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	PROCESSING	0.4	0.2	0.5	0.2	0.5	0.2	0.1	0.3	0.0	0.4	0.0	0.2
83	MACHINING	0.4	0.1	0.2	0.1	0.2	0.1	-0.2	-0.7	-0.2	-1.8	0.0	0.1
85	FABRICATING	4.2	1.5	4.1	1.5	4.4	1.5	0.2	0.8	-0.0	-0.1	0.2	1.5
87	CONSTRUCTION	5.8	2.1	4.5	1.6	4.7	1.6	-1.1	-4.2	-1.3	-13.0	0.2	1.6
91	TRANSPORTATION	4.2	1.6	3.8	1.4	4.0	1.4	-0.2	-0.9	-0.4	-4.3	0.2	1.4
93	MAT. HANDLING	0.8	0.3	0.4	0.1	0.4	0.1	-0.4	-1.6	-0.4	-4.2	0.0	0.1
95	OTHER CRAFTS	2.5	0.9	2.1	0.8	2.2	0.8	-0.3	-1.2	-0.4	-4.1	0.1	0.8
99	OTHER OCC.	7.3	2.7	7.5	2.7	7.9	2.7	0.6	2.5	0.2	2.1	0.4	2.7
	TOTAL	270.0	100.0	280.0	100.0	295.0	100.0	25.0	100.0	10.0	100.0	15.0	100.0

APPENDIX G

2-Digit Occupational Groups
Canadian Classification and Dictionary of Occupations, 1971

11	Managerial, Administrative and Related Occupations
21	Occupations in Natural Sciences, Engineering and Mathematics
23	Occupations in Social Sciences and Related Fields
25	Occupations in Religion
27	Teaching and Related Occupations
31	Occupations in Medicine and Health
33	Artistic, Literary, Performing Arts and Related Occupations
37	Occupations in Sport and Recreation
41	Clerical and Related Occupations
51	Sales Occupation
61	Service Occupations
71	Farming, Horticultural and Animal-Husbandry Occupations
73	Fishing, Hunting, Trapping and Related Occupations
75	Forestry and Logging Occupations
77	Mining and Quarrying Including Oil and Gas Field Occupations
81/82	Processing Occupations
83	Machining and Related Occupations
85	Product Fabricating, Assembling and Repairing Occupations
87	Construction Trades Occupations
91	Transport Equipment Operating Occupations
93	Material-Handling and Related Occupations, n.e.c.
95	Other Crafts and Equipment Operating Occupations
99	Occupations Not Elsewhere Classified

APPENDIX H

Industry-Sector Definitions by 3-Digit Standard Industrial Classifications (SIC)

Industrial Sector		1970 S.I.C.
1.	Agricultural, Fishing & Trapping	001-021,041-047
2.	Forestry	031-039
3.	Mineral Fuel Mines & Wells	061,064
4.	Other Mines & Quarries	051-059,071-099
5.	Food, Feed, Beverage & Tobacco	101-153
6.	Textile & Clothing	181-249
7.	Wood & Furniture	251-268
8.	Paper & Allied Industries	271-289
9.	Primary Metal & Metal Fabricating	291-309
10.	Motor Vehicles & Parts	323-325
11.	Machinery & Other Transportation	311-321,326-329
12.	Electrical Products	331-339
13.	Chemical, Rubber & Petroleum	162-165,365-379
14.	Non-metallic Mineral Products	351-359
15.	Other Manufacturing Industries	172-179,391-399
16.	Construction	404-421
17.	Electric Power & Gas Utilities	572-579
18.	Transportation & Storage	501-527
19.	Communication	543-548
20.	Trade	602-699
21.	Finance, Insurance & Real Estate	701-737
22.	Community, Business & Personal Services	801-899
23.	Public Administration	902-991

FINAL REPORT AND APPENDICES OF THE ONTARIO TASK FORCE ON EMPLOYMENT AND NEW TECHNOLOGY

Final Report: **Employment and New Technology**

Appendices:

1. Labour Market Trends in Ontario, 1950-1980
2. Occupational Employment Trends in Ontario, 1971-1981
3. Emerging New Technology, 1985-1995: Framework for a Survey of Firms
4. Employment and New Technology in Ontario's Manufacturing Sector: A Summary of Selected Industries
5. Employment and New Technology in the Iron and Steel Industry
6. Employment and New Technology in the Metal Fabricating Industry
7. Employment and New Technology in the Machinery and Equipment Industry
8. Employment and New Technology in the Aircraft and Aircraft Parts Industry
9. Employment and New Technology in the Communications Equipment Industry
10. Employment and New Technology in the Office, Store and Business Machine Industry
11. Employment and New Technology in the Plastic Processing Industry
12. Employment and New Technology in Ontario's Service Sector: A Summary of Selected Industries
13. Employment and New Technology in the Chartered Banks and Trust Industry
14. Employment and New Technology in the Insurance Industry
15. Employment and New Technology in the Government Services Industry
16. Employment and New Technology in the Telecommunications Industry
17. Employment and New Technology in the Retail Trade Industry
18. Employment and New Technology in the Computer Services and Management Consulting Industry
19. Industry-Sector and Occupational Employment in Ontario, 1985-1995
20. Technological Change, Productivity, and Employment: Studies of the Overall Economy